ENDO INTERNATIONAL PUBLIC LIMITED COMPANY

Directors' Report and Financial Statements

For the Year Ended December 31, 2016

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DIRECTORS' REPORT
For the Year Ended December 31, 2016

The directors present their report and audited Consolidated Financial Statements for the year ended December 31, 2016.

Principal Activities

Endo International plc is an Ireland-domiciled, generics and specialty branded pharmaceutical company. We aim to be the premier partner to healthcare professionals and payment providers, delivering an innovative suite of generic and branded drugs to meet patients' needs. Unless otherwise indicated or required by the context, references throughout to "Endo," the "Group," "we," "our" or "us" refer to financial information and transactions of Endo Health Solutions Inc. (EHSI) and its consolidated subsidiaries prior to February 28, 2014 and Endo International plc and its consolidated subsidiaries thereafter.

The Group's focus is on U.S. Generic Pharmaceuticals, U.S. Branded Pharmaceuticals and International Pharmaceuticals and we target areas where we can build a leading position. Endo uses a differentiated operating model based on a lean and nimble structure, the rational allocation of capital and an emphasis on research and development for high-value targets. We believe this operating model and the execution of our corporate strategy will enable Endo to create shareholder value over the long-term.

While Endo's primary focus will be on organic growth, we will evaluate and, where appropriate, execute on opportunities to expand through the acquisition of products and companies in areas that will serve patients and customers and that we believe will offer above average growth characteristics and attractive margins.

On October 31, 2013, Endo International plc was incorporated in Ireland as a private limited company and re-registered effective February 18, 2014 as a public limited company. Endo International plc was established for the purpose of facilitating the business combination between EHSI and Paladin Labs Inc. (Paladin). On February 28, 2014, the Group, through a Canadian subsidiary, acquired all of the shares of Paladin and a U.S. subsidiary of the Group merged with and into EHSI, with EHSI surviving the merger. As a result of these transactions, the former shareholders of EHSI and Paladin became the shareholders of Endo International plc and both EHSI and Paladin became indirect wholly-owned subsidiaries of the Group.

We operate in three business segments which are U.S. Generic Pharmaceuticals, U.S. Branded Pharmaceuticals and International Pharmaceuticals. Our segments are further discussed in Note 6. Segment Results in the accompanying Consolidated Financial Statements included in this report.

On September 25, 2015, we acquired Par Pharmaceutical Holdings, Inc. (Par), which develops, licenses, manufactures, markets and distributes innovative and cost-effective pharmaceuticals that help improve patient quality of life. Par focuses on first-to-file or first-to-market opportunities and high-barrier-to-entry products that are difficult to formulate, difficult to manufacture, or that face complex legal and regulatory challenges. The Group's U.S. Generic Pharmaceuticals segment, which was formed through a series of acquisitions including Par, Generics International (US Parent), Inc. (formerly doing business as Qualitest Pharmaceuticals (Qualitest)), Boca Pharmacal LLC (Boca) and DAVA Pharmaceuticals, Inc. (DAVA), now collectively doing business as Par Pharmaceutical, is the fourth largest U.S. generics company based on market share.

Our U.S. Generic Pharmaceuticals portfolio, which accounted for 64% and 51% of total turnover in 2016 and 2015, respectively, currently consists of a differentiated product portfolio including tablets, capsules, powders, injectables, liquids, nasal sprays, ophthalmics and patches.

On January 29, 2015, we acquired Auxilium Pharmaceuticals, Inc. (Auxilium), a fully integrated specialty pharmaceutical company with a focus on developing and commercializing innovative products for specific patients' needs in orthopedics, dermatology and other therapeutic areas. Auxilium was absorbed into our legacy branded business along with branded assets obtained from other acquisitions, including Par, to form our current U.S. Branded Pharmaceuticals segment. We have a portfolio of products offered by our U.S. Branded Pharmaceuticals segment that includes established brand names such as Lidoderm®, OPANA® ER, Voltaren® Gel, Percocet®, Fortesta® Gel, Testim®, TESTOPEL®, Aveed®, Supprelin® LA and XIAFLEX®, among others. Our branded pharmaceuticals comprised approximately 29% and 39% of our total turnover in 2016 and 2015, respectively.

The International Pharmaceuticals segment, which accounted for 7% and 10% of total turnover in 2016 and 2015, respectively, includes a variety of specialty pharmaceutical products for the Canadian, Latin American, South African and world markets, which we acquired in the Paladin acquisition in February 2014, including Litha Healthcare Group Limited (Litha) in South Africa, in the Grupo Farmacéutico Somar, Sociedad Anónima Promotora de Inversión de Capital Variable (Somar) acquisition in July 2014 and through the acquisition of certain Aspen Holdings assets in October 2015 (the Aspen Asset Acquisition). Paladin's key products serve growing therapeutic areas, including attention deficit hyperactivity disorder (ADHD), pain, women's health and oncology. Somar develops, manufactures and markets high-quality generic, branded generic and over-the-counter products across key market segments including dermatology and anti-infectives. Litha is a diversified healthcare group providing services, products and solutions to public and private hospitals, pharmacies, general and specialist practitioners, as well as government healthcare programs. During the fourth quarter of 2016, the Group initiated a process to sell its Litha Healthcare Group Limited and related Sub-Sahara African business assets (Litha) and on February 27, 2017, the Group entered into a definitive agreement to sell Litha to Acino Pharma AG. The assets and liabilities of Litha are classified as held for sale in the Consolidated Balance Sheet as of December 31, 2016. As previously disclosed on its February 28, 2017 earnings conference call, the Group is assessing strategic alternatives for its Somar business. Should this strategic process continue to advance successfully, the assets and liabilities of the Somar business may eventually be classified as held-for-sale in the Group's consolidated balance sheets.

Across all of our businesses, we generated total turnover of $4.01 billion and $3.27 billion in 2016 and 2015, respectively.

On February 24, 2016, the Board of Directors resolved to wind-down the Group's Women's Health Business (formerly part of our American Medical Systems Holdings, Inc. (AMS) business) (referred to herein as Astora) as it did not align with the Group's strategic direction and to reduce Astora's exposure to mesh-related product liability. Astora ceased business operations on March 31, 2016 and completed a wind-down process during 2016 that included, among other things, assisting physician-customers in transitioning to alternative products.

The ordinary shares of Endo International plc are traded on the NASDAQ Global Market (NASDAQ) under the ticker symbol "ENDP." References throughout to "ordinary shares" refer to EHSI's common shares, 350,000,000 authorized, par value $0.01 per share, prior to the consummation of the February 2014 transactions and to Endo International plc's ordinary shares, 1,000,000,000 authorized, par value $0.0001 per share, subsequent to the consummation of these transactions. In addition, on February 11, 2014 the Group issued 4,000,000 euro deferred shares of $0.01 each at par.

Our global headquarters are located at First Floor, Minerva House, Simmonscourt Road, Ballsbridge, Dublin 4, Ireland (telephone number: 011-353-1-268-2000) and our U.S. headquarters are located at 1400 Atwater Drive, Malvern, Pennsylvania 19355 (telephone number: 484-216-0000).

Our Areas of Focus

Generic Pharmaceuticals Market

Our U.S. Generic Pharmaceuticals segment develops, licenses, manufactures, markets and distributes innovative and cost-effective pharmaceuticals with a focus on first-to-file or first-to-market opportunities and high-barrier-to-entry products that are difficult to formulate, difficult to manufacture, or that face complex legal and regulatory challenges.

We sell generic products primarily in the United States across multiple therapeutic categories, including pain management, urology, central nervous system disorders, immunosuppression, oncology, women's health and cardiovascular disease markets, among others. Product dosage forms and delivery systems include solid oral extended-release, solid oral immediate-release and abuse-resistant products, as well as alternative dosage forms such as liquids, semi-solids, patches, powders, ophthalmics, sprays, and sterile injectable products.

Our largest U.S. Generic Pharmaceuticals manufacturing sites are in Chestnut Ridge, New York; Huntsville, Alabama; Irvine, California; Rochester, Michigan; and Chennai, India; which handle the production, assembly, quality assurance testing and packaging of our products. We estimate that, for the products we manufacture, our U.S. facilities contributed over 95% of our manufacturing production based on turnover compared to fewer than 5% contributed by our facility in India.

Refer to the Products Overview section below for additional information on our U.S. Generics Pharmaceutical products.

Branded Pharmaceutical Products Markets

Specialty Pharmaceuticals Market

Endo commercializes a number of products within the market served by specialty distributors and specialty pharmacies, and in which healthcare practitioners (HCPs) can purchase and bill payors directly (the buy and bill market). Our treatment offerings currently are in two distinct areas: Urology, which focuses mainly on XIAFLEX® for the treatment of Peyronie's disease; and in Orthopedics/Pediatric Endocrinology, focusing on XIAFLEX® for Dupuytren's contracture and Supprelin® LA for Central Precocious Puberty (CPP).

Peyronie's Disease (PD)-PD is a condition that involves the development of collagen plaque, or scar tissue, on the shaft of the penis. The scar tissue, known as a Peyronie's plaque, may harden and reduce flexibility, which may cause bending or arching of the penis during erection. PD can result in varying degrees of penile curvature deformity and disease bother, which encompasses concern about erection appearance, erection pain and the impact of PD on intercourse and on frequency of intercourse. PD is a disease with an initial inflammatory component. This inflammatory phase is poorly understood with a somewhat variable disease course and spontaneous resolution occurring in an estimated 20% of cases. After approximately 12 months of disease, the disease is reported to often develop into a more chronic, stable phase. The incidence of PD is estimated between 3% and 9% of the population; however the disease is believed to be underdiagnosed and undertreated.

Dupuytren's Contracture (DC)-DC is a progressive condition that limits hand function, diminishes quality of life, and may ultimately disable the hand through the inability to move or straighten one's finger or fingers. It is caused by an abnormal buildup of collagen. In people with DC, this collagen builds up over time and can thicken into a rope-like cord in the palm that contracts the finger. DC is a genetic condition and the incidence of DC is estimated to be between 3% and 9% of the population among adult Caucasians. DC is more common in men than in women, and increases in incidence with age.

Central Precocious Puberty (CPP)-Precocious puberty is defined as the onset of developmental signs of sexual maturation earlier than would be expected based on population norms. This is typically delineated as puberty onset before eight years in girls and nine years in boys. In the most common form of CPP, sexual maturation proceeds from a premature activation of the hypothalamic-pituitary-gonadal (HPG) axis. The HPG axis is active during infancy, dormant during childhood, and reactivated at the onset of puberty. The epidemiology of CPP is somewhat nebulous, with a commonly cited prevalence range of one in 5,000 to one in 10,000 children. CPP is known to occur more frequently in girls than in boys and has different predominant causes for each sex. Idiopathic CPP, without an identifiable predisposing condition, accounts for the majority of cases of precocious puberty in girls, but is less frequent in boys. Central nervous system findings such as tumors and congenital malformations are more frequently observed in boys who present with central precocious puberty. It is estimated that two thirds of precocious puberty cases in boys are due to neurological abnormalities. The likelihood of an organic cause for CPP is greater in patients who present at younger ages.

Urology Market

Endo has a number of key treatment offerings within the urology markets, specifically the men's health sector with testosterone replacement therapies (TRT).

In the U.S. alone, the prevalence of hypogonadism is approximately 8% of men above 50 years of age, however, only approximately 9% of those affected are currently being treated. By 2025, it is estimated there will be approximately 6.5 million American men 30-80 years of age who are diagnosed with androgen deficiency. Hypogonadism, or low testosterone, is under diagnosed and under treated. Factors contributing to this include a lack of screening for low testosterone and the perceived risk of prostate cancer associated with current treatment strategies. In the U.S., TRT sales were approximately $1.9 billion in 2016. For TRT, our treatment offerings include the long-acting products Aveed®, which was launched in March 2014 and TESTOPEL®. In addition, our TRT treatment offerings include our gel products such as Fortesta® Gel and the authorized generic of Fortesta® Gel, which launched in September 2014, and Testim®.

Pain Management Market

Endo has a number of key treatment offerings within the Pain Management Market. Our treatment offerings currently are in two key areas: Chronic Pain, including OPANA® ER and Percocet® in the opioid analgesics segment, and Lidoderm®, which is for the relief of pain associated with post-herpetic neuralgia; and Osteoarthritis (OA) Pain, which is treated with Voltaren® Gel.

In December 2016, Endo announced that it was returning BELBUCA™ to BioDelivery Sciences International, Inc. (BDSI). As a result of this announcement, Endo restructured its U.S. Branded Pharmaceuticals segment sales organization, which will allow the Group to focus efforts and resources more fully on its core U.S. Branded assets, including XIAFLEX® in the approved indications and the cellulite development program. The Group's legacy pain portfolio products, including OPANA® ER and Percocet®, among others, will be managed as mature brands. The restructuring was comprised of certain cost savings initiatives, including the elimination of an approximate 375-member U.S. Branded pain field sales force.

International Pharmaceuticals Market

Our International Pharmaceuticals segment includes a variety of specialty pharmaceutical and branded generic products for the Canadian, Latin American, South African and non-U.S. markets. During the fourth quarter of 2016, the Group initiated a process to sell its Litha and related Sub-Sahara African business assets and on February 27, 2017, the Group entered into a definitive agreement to sell Litha to Acino Pharma AG.

Products Overview

U.S. Generic Pharmaceuticals

The U.S. Generic Pharmaceuticals segment, which comprised 64% of the Group's consolidated turnover for the year-ended December 31, 2016, consists of a portfolio of over 250 generic prescription product families focused in the areas of pain management, urology, central nervous system (CNS) disorders, immunosuppression, oncology, women's health and cardiovascular disease markets, among others. Generic drugs are the pharmaceutical and therapeutic equivalents of branded products and are generally marketed under their generic (chemical) names rather than by brand names. Typically, a generic drug may not be marketed until the expiration of applicable patent(s) on the corresponding branded product, unless a resolution of patent litigation results in an earlier opportunity to enter the market. Generic drugs are the same as branded products in dosage form, safety, efficacy, route of administration, quality, performance characteristics and intended use, but they are sold generally at prices below those of the corresponding branded products. Generic drugs provide a cost-effective alternative for consumers, while maintaining the same high quality, efficacy, safety profile, purity and stability of the branded product.

An ANDA is required to be filed and approved by the FDA in order to manufacture a generic drug for sale in the United States (except in the case of authorized generics, described further below). We sell generic products primarily in the United States across multiple therapeutic categories. An ANDA that is the first ANDA filed containing a patent challenge to the corresponding branded product (a first-to-file product or a Paragraph IV product) offers the opportunity for 180 days of generic marketing exclusivity if we are successful in litigating the patent challenge and receive final FDA approval of the product. A first-to-market product refers to a product that is the first marketed generic equivalent of a branded product for reasons apart from statutory marketing exclusivity, such as the generic equivalent of a branded product that is difficult to formulate or manufacture. We target these types of market opportunities to mitigate risks from competitive pressure commonly associated with commoditized generic products.

The timing of final FDA approval of ANDA applications depends on a variety of factors, including whether the applicant challenges any listed patents for the drug and whether the manufacturer of the reference listed drug is entitled to one or more regulatory exclusivity periods, during which the FDA is prohibited from approving generic equivalents. In certain circumstances, a regulatory exclusivity period can extend beyond the life of a patent, and thus block ANDAs from being approved until after the patent expiration date. The time required to obtain FDA approval of ANDAs for a new product varies in time, generally requiring a minimum of 10 months following submission of the ANDA to FDA, but could also take several years from the date of application.

We have a generics portfolio across an extensive range of dosage forms and delivery systems, including immediate and extended release oral solids (tablets, orally disintegrating tablets, capsules and powders), injectables, liquids, nasal sprays, ophthalmics (which are sterile pharmaceutical preparations administered for ocular conditions) and transdermal patches (which are medicated adhesive patches designed to deliver the drug through the skin).

We have development, manufacturing and distribution capabilities in the rapidly growing U.S. market for sterile drug products, such as injectable products, ophthalmics, and sterile vial and hormonal handling capabilities. These capabilities afford us a broader and more diversified product portfolio and a greater selection of targets for potential development. We target products with limited competition for reasons such as manufacturing complexity or the market size, which make our sterile products a key growth driver of our generics portfolio and complementary to our other generic product offerings.

Authorized generics are generic versions of branded drugs licensed by brand drug companies under a New Drug Application (NDA) and marketed as generics. Authorized generics do not face regulatory barriers to introduction and are not prohibited from sale during the 180-day marketing exclusivity period granted to the first-to-file ANDA applicant. The sale of authorized generics adversely impacts the market share of a generic product that has been granted 180 days of marketing exclusivity. Our recent authorized generics include lidocaine patch 5% (Lidoderm®), metoprolol succinate ER (Toprol-XL®), budesonide (Entocort® EC), and diclofenac sodium gel (Voltaren® Gel). We believe we are a partner of choice to larger brand companies seeking an authorized generics distributor for their branded products. We have recently been the authorized generic distributor for such companies as AstraZeneca plc, Bristol-Myers Squibb Company, and Merck & Co., Inc.

The following table displays the product turnover to external customers in our U.S Generics Pharmaceuticals segment for the years ended December 31 (in thousands):

	2016	2015
U.S. Generic Pharmaceuticals (1):		
U.S. Generics Base	$ 1,230,097	$ 1,083,809
Sterile Injectables	530,805	107,592
New Launches and Alternative Dosages	803,711	481,015
Total U.S. Generic Pharmaceuticals	$ 2,564,613	$ 1,672,416

U.S. Generics Base is comprised of more than 200 solid oral-extended release, solid oral-immediate release and pain/controlled substances products. This category includes the antidepressant bupropion XL and the portfolio of opioid-containing products such as hydrocodone bitartrate and acetaminophen tablets.

Sterile Injectables is comprised of high-barrier-to-entry injectable products that are generally difficult to manufacture, including Vasostrict®, the first and only vasopressin injection product approved by the FDA. We have been issued a patent relating to Vasostrict® by the U.S. Patent and Trademark Office (PTO). This patent expires in January 2035 and was submitted to the FDA's Approved Drug Products with Therapeutic Equivalence Evaluations (known as the Orange Book) on June 28, 2016. The Orange Book listing requires any ANDA applicant seeking FDA approval for a generic version of Vasostrict® prior to expiration of the patent to notify us of its ANDA filing before it can obtain FDA approval. Any ANDA filer seeking approval prior to patent expiry whose application was not received prior to submission of the patent information would be subject to a 30-month stay of marketing approval by the FDA upon our initiation of Hatch-Waxman litigation against the ANDA filer within the statutory time period.

New Launches and Alternative Dosages is comprised of liquids, semi-solids, patches, powders, ophthalmics, sprays and new product launches. Products are included in New Launches during the calendar year of launch and the subsequent calendar year such that the period of time any product will be considered a New Launch will range from thirteen to twenty-four months. Material products launched in 2016 include ezetimibe tablets (generic version of Zetia®), which is a first-to-file product with an associated brand value of approximately $2.6 billion, and quetiapine ER tablets (generic version of Seroquel® XR), which is a first-to-file product with an associated brand value of approximately $1.3 billion.

U.S. Branded Pharmaceuticals

The following table displays the U.S. product turnover to external customers in our U.S. Branded Pharmaceuticals for the years ended December 31 (in thousands):

	2016	2015
Pain Management:		
Lidoderm®	$ 87,577	$ 125,269
OPANA® ER	158,938	175,772
Percocet®	139,211	135,822
Voltaren® Gel	100,642	207,161
	$ 486,368	$ 644,024
Specialty Pharmaceuticals:		
Supprelin® LA	$ 78,648	$ 70,099
XIAFLEX®	189,689	158,115
	$ 268,337	$ 228,214
Branded Other Turnover (1)	411,589	412,369
Actavis Royalty	—	—
Total U.S. Branded Pharmaceuticals (2)	$ 1,166,294	$ 1,284,607

(1) Products included within Branded Other Turnover in the table above include, but are not limited to, TESTOPEL®, Testim®, Fortesta® Gel, including authorized generic, and Nascobal® Nasal Spray.

(2) Individual products presented above represent the top two performing products in each product category and/or any product having turnover in excess of $100.0 million during the years ended December 31, 2016 or 2015.

Pain Management

Lidoderm®. Lidoderm® was launched in September 1999. A topical patch product containing lidocaine, Lidoderm® was the first FDA approved product for the relief of the pain associated with post-herpetic neuralgia, a condition thought to result after nerve fibers are damaged during a case of Herpes Zoster (commonly known as shingles). In May 2012, we entered into a settlement and license agreement with Watson Pharmaceuticals, Inc. (Watson), subsequently acquired by Teva Pharmaceutical Industries (Teva), which allowed Watson to launch its lidocaine patch 5%, a generic version of Lidoderm® on September 15, 2013. In May 2014, the Group's U.S. Generic Pharmaceuticals segment launched its authorized generic of Lidoderm®. In August 2015, Mylan, Inc. (Mylan) launched a generic version of Lidoderm®.

OPANA® ER. OPANA® ER is an opioid agonist indicated for the management of pain severe enough to require daily, around-the-clock, long-term opioid treatment and for which alternative treatment options are inadequate. OPANA® ER represents the first drug in which oxymorphone is available in an oral, extended-release formulation and is available in 5 mg, 7.5 mg, 10 mg, 15 mg, 20 mg, 30 mg and 40 mg tablets. In December 2011, the FDA approved a new formulation of OPANA® ER with INTAC® technology. This formulation of OPANA® ER with INTAC® technology has the same dosage strengths, color and packaging and similar tablet size as original OPANA® ER. Endo transitioned to this formulation in March 2012 upon successfully accelerating its production. Launches of competing generic versions of the non-INTAC® technology formulation OPANA® ER, which began in early 2013, adversely affected our results of operations.

In March 2017, we announced that the FDA's Drug Safety and Risk Management and Anesthetic and Analgesic Drug Products Advisory Committees (the Committees) voted that the benefits of reformulated OPANA® ER (oxymorphone hydrochloride extended release) no longer outweigh its risks. While several of the Committee members acknowledged the role of OPANA® ER in clinical practice, others believed its benefits are now outweighed by the continuing public health concerns around the product's misuse, abuse and diversion. During the Committees' discussion following the vote, a number of Committee members recommended that OPANA® ER remain on the market with additional regulatory restrictions to mitigate the risks. The FDA convened these Committees to discuss pre- and post-marketing data about the abuse of OPANA® ER, the product's overall risk-benefit profile, as well as the abuse of generic oxymorphone ER and oxymorphone immediate-release products. While the FDA will consider the Committees' vote, any decision regarding whether to take regulatory action rests solely with the FDA.

Percocet®. Launched in 1976, Percocet® is approved for the treatment of moderate-to-moderately severe pain.

Voltaren® Gel. On March 4, 2008, the Group entered into a License and Supply Agreement with and among Novartis AG and Novartis Consumer Health, Inc. (the 2008 Voltaren® Gel Agreement) to obtain the exclusive U.S. marketing rights for the prescription medicine Voltaren® Gel. On December 11, 2015, the Group, Novartis AG and Sandoz entered into a new License and Supply Agreement (the 2015 Voltaren® Gel Agreement) providing Endo with exclusive U.S. marketing and license rights to commercialize Voltaren® Gel and the authorized generic version of Voltaren® Gel through June 30, 2023. Voltaren® Gel received regulatory approval in October 2007 from the FDA, becoming the first topical prescription treatment for the relief of joint pain of osteoarthritis in the knees, ankles, feet, elbows, wrists, and hands and became the first new product approved in the U.S. for osteoarthritis since 2001. It was the first prescription topical osteoarthritis treatment to have proven its effectiveness in both the knees and joints of the hands through clinical trials. Voltaren® Gel delivers effective pain relief with a favorable safety profile as its systemic absorption is 94% less than the comparable oral diclofenac treatment. It is now the most prescribed FDA-approved topical nonsteroidal anti-inflammatory drug (NSAID) for the relief of osteoarthritis pain.

Specialty Pharmaceuticals

Supprelin® LA. Supprelin® LA was launched in the U.S. in June 2007. Supprelin® LA is a soft, flexible 12-month hydrogel implant based on our hydrogel polymer technology that delivers histrelin acetate, a gonadotropin releasing hormone (GnRH) agonist and is indicated for the treatment of CPP in children. CPP is the early onset of puberty in young children resulting in the development of secondary sex characteristics and, if left untreated, can result in diminished adult height attainment. The development of these secondary sex characteristics is due to an increase in the secretion of sex hormones, the cause of which is unknown. We market Supprelin® LA in the U.S. through a specialty sales force primarily to pediatric endocrinologists.

XIAFLEX®. XIAFLEX® was launched in 2010 for the treatment of adult patients with DC with an abnormal buildup of collagen in the fingers which limits or disables hand function. It is also indicated for the treatment of adult men with PD with a collagen plaque and a penile curvature deformity of thirty degrees or greater at the start of therapy. XIAFLEX® was launched in the U.S. for PD in January 2014 and is the first and only FDA-approved non-surgical treatment for PD.

Branded Other

Branded Other Turnover in the table above include but are not limited to the following products:

Fortesta® Gel and Fortesta® Gel Authorized Generic. Fortesta® Gel is a patented two percent (2%) testosterone transdermal gel and is a treatment for men suffering from hypogonadism, also known as low testosterone (Low-T). The precision-metered dose delivery system can be accurately customized and adjusted to meet individual patient needs with the appropriate dose. In August 2009, we entered into a License and Supply Agreement with Strakan International Limited, a subsidiary of ProStrakan Group plc, for the exclusive right to commercialize Fortesta® Gel in the U.S. Fortesta® Gel was approved by the FDA in December 2010. We launched Fortesta® Gel in the first quarter of 2011. During the third quarter of 2014, Endo announced that it had introduced the first and only generic 2% topical testosterone gel, an authorized generic of Fortesta® Gel.

Testim® and Testim® Authorized Generic. Testim® is a topical gel indicated for TRT in conditions associated with a deficiency or absence of endogenous testosterone.

Frova®. Frova® is indicated for the acute treatment of migraine headaches in adults.

Valstar®. Valstar® is a sterile solution for intravesical instillation of valrubicin, a chemotherapeutic anthracycline derivative. Valstar® is indicated for intravesical therapy of Bacillus Calmette-Guerin (BCG)-refractory carcinoma *in situ* (CIS) of the urinary bladder in patients for whom immediate cystectomy would be associated with unacceptable morbidity or mortality.

Vantas®. Vantas® is a soft, flexible 12-month hydrogel implant based on our hydrogel polymer technology that delivers histrelin acetate, a GnRH agonist, and is indicated for the palliative treatment of advanced prostate cancer.

Aveed®. Aveed® is a novel, long-acting testosterone undecanoate for injection for the treatment of Low-T. Aveed® is dosed only five times per year after the first month of therapy. In a clinical trial, nearly all men who received Aveed® maintained average testosterone levels within the normal range for 10 full weeks after the third injection. Aveed® was approved by the FDA and launched in March 2014.

TESTOPEL®. TESTOPEL® is a unique, long-acting implantable pellet indicated for TRT in conditions associated with a deficiency or absence of endogenous testosterone.

NASCOBAL® Nasal Spray. NASCOBAL® Nasal Spray is a prescription medicine used as a supplement to treat vitamin B_{12} deficiency. NASCOBAL® is the only FDA-approved B_{12} nasal spray. It is clinically proven to increase and maintain healthy B_{12} levels. NASCOBAL® is a tasteless and odorless fine mist with once-weekly dosing.

Actavis Royalty

Actavis Royalty. Royalty income from Actavis plc (Actavis) is based on Actavis' gross profit generated on sales of its generic version of Lidoderm®, which commenced on September 16, 2013 and ceased in May 2014, upon our launch of the Lidoderm® authorized generic.

International Pharmaceuticals

Our International Pharmaceuticals segment includes a variety of specialty pharmaceutical products for the Canadian, Mexican, South African and certain other non-U.S. markets.

Paladin, based in Canada, has a portfolio of products serving growing therapeutic areas, including ADHD, pain, women's health and oncology.

Somar, based in Mexico, develops, manufactures and markets high-quality generic, branded generic and over-the-counter products across key market segments including dermatology and anti-infectives. As previously disclosed on its February 28, 2017 earnings conference call, the Group is assessing strategic alternatives for its Somar business. Should this strategic process continue to advance successfully, the assets and liabilities of the Somar business may eventually be classified as held-for-sale in the Group's consolidated balance sheets.

Litha, based in South Africa, is a diversified healthcare group providing services, products and solutions to public and private hospitals, pharmacies, general and specialist practitioners, as well as government healthcare programs. During the fourth quarter of 2016, the Group initiated a process to sell its Litha and related Sub-Sahara African business assets and on February 27, 2017, the Group entered into a definitive agreement to sell Litha to Acino Pharma AG.

Select Products in Development

U.S. Generic Pharmaceuticals

Our primary approach to generic pharmaceutical product development is to target high-barrier-to-entry generic products, including first-to-file or first-to-market opportunities. Our potential first-to-file and first-to-market opportunities account for approximately one-third of our pipeline of ANDAs. We expect that these potential first-to-file and first-to-market opportunities to result in products that are either exclusive or have two or fewer competitors when launched, which we believe tends to lead to more sustainable market share and profitability for our product portfolio.

As of December 31, 2016, we had over 200 products in our pipeline, which included approximately 120 ANDAs pending with the FDA representing approximately $32.0 billion of combined annual sales for the corresponding branded products in 2016, including 35 potential first-to-file and four first-to-market opportunities.

U.S. Branded Pharmaceuticals

XIAFLEX® (collagenase clostridium histolyticum or CCH) is currently approved and marketed in the U.S. for the treatment of both DC and PD (two separate indications). We are progressing the cellulite development program following meetings held with the FDA in December 2014 and a subsequent follow-up meeting in December 2015. In addition, our Phase 2b study was initiated and completed and the results were released in November 2016. An End of Phase 2 meeting with the FDA occurred in early 2017 and we will continue to work with the FDA in advance of initiating our Phase 3 clinical trials. We also have the right to further develop XIAFLEX® for additional indications, including Dupuytren's Nodules, Adhesive Capsulitis and Lateral Hip Fat, Plantar Fibromatosis and human and canine lipomas.

International Pharmaceuticals

We have submitted applications for regulatory approval of various products in our international markets. In addition, pursuant to an existing agreement with Novartis AG (Novartis), our Paladin subsidiary licensed the Canadian rights to commercialize RLX030 (serelaxin), an investigational drug for the treatment of acute heart failure (AHF). On March 22, 2017, Novartis announced that a Phase III study of serelaxin in patients with AHF failed to meet its primary endpoints.

Competition

Generic Pharmaceuticals

In the generic pharmaceutical market, we face intense competition from other generic drug manufacturers, brand name pharmaceutical companies through authorized generics, existing brand equivalents and manufacturers of therapeutically similar drugs. Our major competitors in the generics market, including Teva, Mylan, Sandoz and Impax Laboratories, Inc. (Impax), vary by specific product.

Our primary strategy is to compete in the generic product market with a focus on high-value, first-to-file or first-to-market opportunities, regardless of therapeutic category, and products that present significant barriers to entry for reasons such as complex formulation or regulatory or legal challenges. By specializing in high-barrier-to-entry products, we endeavor to market more profitable and longer-lived products relative to commodity generic products. We believe that our competitive advantages include our integrated team-based approach to product development that combines our formulation, regulatory, legal, manufacturing and commercial capabilities; our ability to introduce new generic equivalents for brand-name drugs; our quality and cost-effective production; our ability to meet customer expectations; and the breadth of our existing generic product portfolio offering.

We make a significant portion of our sales to a relatively small number of drug wholesalers and retail drug store chains. These customers play a key role in the distribution chain of our pharmaceutical products. Drug wholesalers and retail drug store chains have undergone, and are continuing to undergo, significant consolidation, which has resulted in these groups gaining additional purchasing leverage that has increased the pricing pressures on our business. Additionally, the emergence of large buying groups representing independent retail pharmacies and other drug distributors, and the prevalence and influence of managed care organizations and similar institutions, enable those groups to demand larger price discounts on our products. For example, there has been a recent trend of large retail customers forming partnerships with large wholesalers, such as the alliances between Walgreens and AmerisourceBergen Corporation, between Rite Aid and McKesson Drug Company and between CVS and Cardinal Health. As a result of these alliances, as well as the consolidation among wholesale distributors and the growth of large retail drug store chains, a small number of purchasers control a significant share of purchases and have gained more purchasing power that has heightened competition among generic drug producers for the business of this consolidated customer base.

Newly introduced generic products with limited or no other generic competition typically garner higher prices relative to commoditized generic products. At the expiration of any statutory generic exclusivity period, other generic distributors may enter the market, resulting in significant price declines. Consequently, the maintenance of profitable operations in generic pharmaceuticals depends, in part, on our continuing ability to select, develop, procure regulatory approvals of, overcome legal challenges to, launch and commercialize new generic products in a timely and cost efficient manner and to maintain efficient, high quality manufacturing capabilities. We also have diverse manufacturing capabilities covering almost all generic presentations, such as solid oral dose, gels, liquids, nasal sprays, ophthalmics, films, transdermal patches and injectable products.

Branded Pharmaceuticals

The branded pharmaceutical industry is highly competitive. Our products compete with products manufactured by many other companies in highly competitive markets throughout the U.S. and internationally primarily through our Paladin, Somar and Litha businesses. Our competitors vary depending upon therapeutic and product categories. Competitors include many of the major brand name and generic manufacturers of pharmaceuticals. With respect to branded pharmaceuticals, our competitors, including Abbott Laboratories (Abbott), Allergan plc (Allergan), Purdue Pharma, L.P. (Purdue), Jazz Pharmaceuticals plc (Jazz), Shire plc (Shire), Horizon Pharma plc (Horizon), and Mallinckrodt plc (Mallinckrodt), among others, vary depending on product category, dosage strength and drug-delivery systems.

We compete principally through targeted product development and our acquisition and in-licensing strategies. The competitive landscape in the acquisition and in-licensing of pharmaceutical products has intensified in recent years as there has been a reduction in the number of compounds available and an increase in the number of companies and the collective resources bidding on available assets. In addition to product development and acquisitions, other competitive factors in the pharmaceutical industry include product efficacy, safety, ease of use, price, demonstrated cost-effectiveness, marketing effectiveness, service, reputation and access to technical information.

The competitive environment of the branded product business requires us to continually seek out technological innovations and to market our products effectively. However, some of our current branded products face competition not only from other brands, but also from generic versions. Generic versions are generally significantly less expensive than branded versions, and, where available, may be required in preference to the branded version under third-party reimbursement programs, or substituted by pharmacies. If competitors introduce new products, delivery systems or processes with therapeutic or cost advantages, our products can be subject to progressive price reductions or decreased volume of sales, or both. Most new products that we introduce must compete with other products already on the market or products that are later developed by competitors. Manufacturers of generic pharmaceuticals typically invest far less in research and development than research-based pharmaceutical companies and therefore can price their products significantly lower than branded products. Accordingly, when a branded product loses its market exclusivity, it normally faces intense price competition from generic forms of the product. To successfully compete for business with managed care and pharmacy benefits management organizations, we must often demonstrate that our products offer not only medical benefits but also cost advantages as compared with other forms of care.

We are aware of certain competitive activities involving OPANA® ER and other products. For a description of these competitive activities, including the litigation related to Paragraph IV Certification Notices, see Note 13. Commitments and Contingencies in the accompanying Consolidated Financial Statements included in this report.

Seasonality

Although our business is affected by the purchasing patterns and concentration of our customers, our business is not materially impacted by seasonality.

Major Customers

We primarily sell our generic and branded pharmaceuticals to wholesalers, drug store chains, supermarket chains, mass merchandisers, distributors, mail order accounts, hospitals and government agencies. Our wholesalers and distributors purchase products from us and, in turn, supply products to retail drug store chains, independent pharmacies and managed health care organizations. Customers in the managed health care market include health maintenance organizations, nursing homes, hospitals, clinics, pharmacy benefit management companies and mail order customers. Total turnover from customers that accounted for 10% or more of our total consolidated turnover during the years ended December 31 are as follows:

	2016	2015
Cardinal Health, Inc.	26%	21%
McKesson Corporation	27%	31%
AmerisourceBergen Corporation	25%	23%

Turnover from these customers are included within our U.S. Generic Pharmaceuticals, U.S. Branded Pharmaceuticals, and International Pharmaceuticals segments.

As a result of consolidation among wholesale distributors as well as rapid growth of large retail drug store chains, a small number of large wholesale distributors control a significant share of the market, and the number of independent drug stores and small drug store chains has decreased. Some wholesale distributors have demanded that pharmaceutical manufacturers, including us, enter into distribution service agreements (DSAs) pursuant to which the wholesale distributors provide the pharmaceutical manufacturers with specific services, including the provision of periodic retail demand information and current stock levels and other information. We have entered into certain of these agreements.

Turnover related to independent specialty pharmacies during the year ended December 31, 2016 was approximately 4% of the Group's overall 2016 turnover.

Patents, Trademarks, Licenses and Proprietary Property

As of February 21, 2017, we held approximately: 246 U.S. issued patents, 67 U.S. patent applications pending, 553 foreign issued patents, and 158 foreign patent applications pending. In addition, as of February 21, 2017, we have licenses for approximately 59 U.S. issued patents, 38 U.S. patent applications pending, 210 foreign issued patents and 85 foreign patent applications pending. The following table sets forth information as of February 21, 2017 regarding patents relating to each of our most significant products:

Patent No.	Patent Expiration*	Relevant Product	Ownership	Jurisdiction Where Granted
8,075,872	November 20, 2023	OPANA® ER	Exclusive License	USA
8,114,383	October 10, 2024	OPANA® ER	Exclusive License	USA
8,192,722	September 15, 2025	OPANA® ER	Exclusive License	USA
8,309,060	November 20, 2023	OPANA® ER	Exclusive License	USA
8,309,122	February 4, 2023	OPANA® ER	Owned	USA
8,329,216	February 4, 2023	OPANA® ER	Owned	USA
8,808,737	June 21, 2027	OPANA® ER	Owned	USA
8,871,779	November 22, 2029	OPANA® ER	Exclusive License	USA
7,718,640	March 14, 2027	Aveed®	Exclusive License	USA
8,338,395	February 27, 2026	Aveed®	Exclusive License	USA
RE39,941	August 24, 2019	XIAFLEX®	Exclusive License	USA
6,022,539	June 3, 2019	XIAFLEX®	Exclusive License	USA
7,811,560	July 12, 2028	XIAFLEX®	Owned; Exclusive License	USA
7,229,636	August 1, 2024	Nascobal®	Owned	USA
7,404,489	March 12, 2024	Nascobal®	Owned	USA
7,879,349	August 1, 2024	Nascobal®	Owned	USA
8,003,353	August 1, 2024	Nascobal®	Owned	USA
8,940,714	February 26, 2024	Nascobal®	Owned	USA
9,375,478	January 30, 2035	Vasostrict®	Owned	USA

* Our exclusive license agreements extend to or beyond the patent expiration dates.

The effect of these issued patents is that they provide us with patent protection for the claims covered by the patents. The coverage claimed in a patent application can be significantly reduced before the patent is issued. Accordingly, we do not know whether any of the applications we acquire or license will result in the issuance of patents, or, if any patents are issued, whether they will provide significant proprietary protection or will be challenged, circumvented or invalidated. Because unissued U.S. patent applications are maintained in secrecy for a period of eighteen months and U.S. patent applications filed prior to November 29, 2000 are not disclosed until such patents are issued, and since publication of discoveries in the scientific or patent literature often lags behind actual discoveries, we cannot be certain of the priority of inventions covered by pending patent applications. Moreover, we may have to participate in interference and other inter parties proceedings declared by the PTO to determine priority of invention, or in opposition proceedings in a foreign patent office, either of which could result in substantial cost to us, even if the eventual outcome is favorable to us. There can be no assurance that any patents, if issued, will be held valid by a court of competent jurisdiction. An adverse outcome could subject us to significant liabilities to third parties, require disputed rights to be licensed from third parties or require us to cease using such technology.

We believe that our patents, the protection of discoveries in connection with our development activities, our proprietary products, technologies, processes and know-how and all of our intellectual property are important to our business. All of our branded products and certain generic products, such as Endocet® and Endodan® are sold under trademarks. To achieve a competitive position, we rely on trade secrets, non-patented proprietary know-how and continuing technological innovation, where patent protection is not believed to be appropriate or attainable. In addition, as outlined above, we have a number of patent licenses from third parties, some of which may be important to our business. See Note 11. License and Collaboration Agreements in the accompanying Consolidated Financial Statements included in this report. There can be no assurance that any of our patents, licenses or other intellectual property rights will afford us any protection from competition.

We rely on confidentiality agreements with our employees, consultants and other parties to protect, among other things, trade secrets and other proprietary technology. There can be no assurance that these agreements will not be breached, that we will have adequate remedies for any breach, that others will not independently develop equivalent proprietary information or that other third parties will not otherwise gain access to our trade secrets and other intellectual property.

We may find it necessary to initiate litigation to enforce our patent rights, to protect our intellectual property or to determine the scope and validity of the proprietary rights of others. Litigation is costly and time-consuming, and there can be no assurance that our litigation expenses will not be significant in the future or that we will prevail in any such litigation. See Note 13. Commitments and Contingencies in the accompanying Consolidated Financial Statements,included in this report.

Service Agreements

We contract with various third parties to provide certain critical services including manufacturing, supply, warehousing, distribution, customer service, certain financial functions, certain research and development activities and medical affairs.

For a complete description of our significant manufacturing, supply and other service agreements, see Note 13. Commitments and Contingencies in the accompanying Consolidated Financial Statements included in this report.

We primarily purchase our raw materials for the production and development of our products in the open market from third party suppliers. However, some raw materials are only available from one source. We attempt, when possible, to mitigate our raw material supply risks through stock management and alternative sourcing strategies. We are required to identify the suppliers of all raw materials for our products in the drug applications that we file with the FDA. If the raw materials from an approved supplier for a particular product become unavailable, we would be required to qualify a substitute supplier with the FDA, which would likely interrupt manufacturing of the affected product. See "Principal Risks" for further discussion on the risks associated with the sourcing of our raw materials.

License and Collaboration Agreements and Acquisitions

We continue to seek to enhance our product line and develop a balanced portfolio of differentiated products through product acquisitions and in-licensing, or acquiring licenses to products, compounds and technologies from third parties. The Group enters into strategic alliances and collaborative arrangements with third parties, which give the Group rights to develop, manufacture, market and/or sell pharmaceutical products, the rights to which are primarily owned by these third parties. These alliances and arrangements can take many forms, including licensing arrangements, co-development and co-marketing agreements, co-promotion arrangements, research collaborations and joint ventures. Such alliances and arrangements enable us to share the risk of incurring all research and development expenses that do not lead to turnover-generating products; however, because profits from alliance products are shared with the counter-parties to the collaborative arrangement, the gross margins on alliance products are generally lower, sometimes substantially so, than the gross margins that could be achieved had the Group not opted for a development partner. For a full discussion, including agreement terms and status, see our disclosures in Note 5. Acquisitions and Note 11. License and Collaboration Agreements in the accompanying Consolidated Financial Statements included in this report.

Environmental Matters

Our operations are subject to substantial federal, state and local environmental laws and regulations concerning, among other matters, the generation, handling, storage, transportation, treatment and disposal of, and exposure to, hazardous substances. Violation of these laws and regulations, which frequently change, can lead to substantial fines and penalties. Many of our operations require environmental permits and controls to prevent and limit pollution of the environment. We believe that our facilities and the facilities of our third party service providers are in substantial compliance with applicable environmental laws and regulations and we do not believe that future compliance will have a material adverse effect on our financial condition or results of operations.

Employees

As of February 21, 2017, we have 4,894 employees, of which 1,172 are engaged in research and development and regulatory work, 276 in sales and marketing, 1,933 in manufacturing, 136 in quality assurance and 1,377 in general and administrative capacities. Our employees are generally not represented by unions, with the exception of certain production personnel in our Rochester, Michigan and Mexican manufacturing facilities. We believe that our relations with our employees are good.

Review of the Performance of the Business

Overview

Endo International plc is an Ireland-domiciled, global specialty pharmaceutical company focused on generic and branded pharmaceuticals. We aim to be the premier partner to healthcare professionals and payment providers, delivering an innovative suite of generic and branded drugs to meet patients' needs. This executive summary provides highlights from the results of operations that follow:

- Total turnover in 2016 increased 23% to $4,010.3 million from 2015. This turnover increase was primarily attributable to turnover related to our September 2015 acquisition of Par Pharmaceutical Holdings, Inc. (Par). The increase was partially offset by decreased turnover for certain products in our U.S. Branded Pharmaceuticals segment, driven mainly by decreased Voltaren® Gel, Lidoderm®, OPANA® ER and Frova® turnover related to generic competition and decreased turnover from our legacy U.S. Generic Pharmaceuticals segment as a result of competitive pressure on commoditized generic products.
- Gross margin for 2016 decreased to 34% from 36% in 2015. This decrease was primarily attributable to the mix of turnover being more heavily weighted toward lower margin generic pharmaceutical product sales as compared to the higher margin branded products, increased intangible asset amortization of $315.1 million for 2016 and charges to increase excess stock reserves.
- Asset impairment charges in 2016 increased to $3,781.2 million compared to $1,140.7 million in 2015 driven primarily by goodwill and intangible asset impairment charges in our Generics, Paladin, Litha, and Somar reporting units.
- During the year ended December 31, 2016, the Group recognized an income tax benefit of $700.1 million on $3,923.9 million of loss of ordinary activities before taxation, compared to $1,137.5 million of tax benefit on $1,437.9 million of loss of ordinary activities before taxation during the comparable 2015 period. During the year ended December 31, 2016, the Group completed a legal entity restructuring as part of its continuing integration of its business. This resulted in the realization of a $636.1 million tax benefit arising from an outside basis difference that was reduced by a $394.6 million charge for the establishment of a valuation allowance on a portion of the Group's U.S. deferred tax assets. The tax benefit for the comparable 2015 period was primarily related to losses from continued operations combined with benefits resulting from the expected realization of deferred tax assets for certain components of the Group's AMS business arising from tax refunds relating to the carryback of net operating losses.
- Loss on ordinary activities for 2016 increased to $3,223.8 million from $300.4 million for the year ended

Strategy

Endo's strategy is to focus on our core assets, a leading U.S. generics business and a specialty branded pharmaceutical business, that deliver high quality medicines to patients through excellence in development, manufacturing, and commercialization. Through a lean and efficient operating model, we are committed to serving patients and customers while continuing to innovate and provide products that make a difference in the lives of patients. We strive to maximize shareholder value by adapting to market realities and customer needs.

We are committed to driving organic growth at attractive margins by improving execution, optimizing cash flow and leveraging our market position, while maintaining a streamlined cost structure throughout each of our businesses. Specific areas of management's focus include:

- U.S. Generic Pharmaceuticals: Capitalizing on encouraging demand trends for a differentiated product portfolio and focusing on developing or acquiring high-barrier-to-entry products, including first-to-file or first-to-market opportunities that are difficult to formulate, difficult to manufacture or face complex legal and regulatory challenges.
- U.S. Branded Pharmaceuticals: Accelerating performance of organic growth drivers in our Specialty portfolio, increasing profitability from our mature brands and investing in key pipeline development opportunities.
- International Pharmaceuticals: Operating in high growth business segments with durable turnover streams and where physicians play a significant role in choosing the course of therapy and expanding distribution of certain of our generic and branded products outside of the U.S.

We remain committed to strategic R&D across each business unit. Going forward, while our primary focus will be on organic growth, we will evaluate and, where appropriate, execute on opportunities to expand through acquisitions of products and companies.

Results of Operations

We reported net loss attributable to Endo International plc in 2016 of $3,347.1 million or $15.03 per diluted share on total turnover of $4,010.3 million compared with net loss attributable to Endo International plc of $1,495.0 million or $7.59 per diluted share on total turnover of $3,268.7 million in 2015.

Consolidated Results Review

Year Ended December 31, 2016 Compared to Year Ended December 31, 2015

Total Turnover. Total turnover in 2016 increased 23% to $4,010.3 million from $3,268.7 million in 2015. This turnover increase was primarily attributable to turnover related to our September 2015 acquisition of Par. The increase was partially offset by decreased turnover for certain products in our U.S. Branded Pharmaceuticals segment, driven mainly by decreased Voltaren® Gel, Lidoderm®, OPANA® ER and Frova® turnover related to generic competition. In addition, we experienced decreased turnover in our legacy U.S. Generic Pharmaceuticals business, which resulted from competitive pressure on commoditized generic products.

Gross margin, costs and expenses. The following table sets forth costs and expenses for the years ended December 31 (dollars in thousands):

	2016		2015	
	$	% of Turnover	$	% of Turnover
Cost of sales	$ 2,634,973	66	$ 2,075,651	64
Selling, general and administrative	770,728	19	741,304	23
Research and development	183,372	5	102,197	3
Litigation-related and other contingencies, net	23,950	1	37,082	1
Asset impairment charges	3,781,165	94	1,140,709	35
Acquisition-related and integration items	87,601	2	105,250	3
Total costs and expenses*	$ 7,481,789	187	$ 4,202,193	129

* Percentages may not add due to rounding.

Cost of sales and gross margin. Cost of sales in 2016 increased 27% to $2,635.0 million from 2015. These increases were primarily attributable to increased costs related to our acquisition of Par, including intangible asset amortization, and increased charges related to excess stock reserves of approximately $36 million. These stock charges were primarily due to the underperformance of certain products and the planned discontinuance of several products as part of the 2016 U.S. Generic Pharmaceuticals restructuring initiative announced in May 2016. Gross margins for 2016 decreased to 34% from 36% in 2015. These decreases were primarily attributable to the mix of turnover being more heavily weighted toward lower margin generic pharmaceutical product sales as compared to the higher margin branded products, increased intangible asset amortization of $315.1 million for 2016 and the charges to increase excess stock reserves mentioned above.

Selling, general and administrative expenses. Selling, general and administrative expenses in 2016 increased 4% to $770.7 million from 2015. This increase was primarily a result of incremental employee, facility and other selling, general and administrative expenses related to the acquisition of Par. In addition, we implemented several restructuring initiatives during 2016, including the 2016 U.S Generic Pharmaceuticals Restructuring and the 2016 U.S. Branded Pharmaceutical Restructuring, which resulted in charges of $17.0 million and $16.5 million, respectively. These increases were partially offset by a charge during the first quarter of 2015 related to the acceleration of Auxilium Pharmaceuticals, Inc. (Auxilium) employee equity awards at closing of $37.6 million, restructuring charges during 2015 of $26.7 million related to the Auxilium acquisition and restructuring charges during 2015 of $23.6 million related to the Par acquisition.

Research and development expenses. Research and development (R&D) expenses in 2016 increased 79% to $183.4 million from 2015. The following table presents the composition of our total R&D expense for the years ended December 31 (in thousands):

	Research and Development Expense (in thousands)	
	2016	2015
U.S. Generic Pharmaceuticals portfolio	$ 128,330	$ 58,418
U.S. Branded Pharmaceuticals portfolio	49,062	25,828
International Pharmaceuticals portfolio	3,348	9,624
Enterprise-wide R&D costs	2,632	8,327
Total R&D expense	$ 183,372	$ 102,197

Our primary U.S. Generic Pharmaceuticals R&D efforts are focused on high-barrier-to-entry generic products, including first-to-file or first-to-market opportunities that are difficult to formulate, difficult to manufacture or face complex legal and regulatory challenges. We believe products with these characteristics will face a lesser degree of competition and therefore provide longer product life cycles and higher profitability than commodity generic products. In 2016 and 2015, our direct R&D expense related to generics totaled $128.3 million and $58.4 million, respectively. The increase in expense is a result of the Par acquisition and additional investments in expanding our research and development and manufacturing capabilities.

The increase in U.S. Branded Pharmaceuticals expenses in 2016 was primarily attributable to costs incurred related to the development of XIAFLEX® for the treatment of cellulite, including Phase 2 clinical trials.

Litigation-related and other contingencies, net. Charges for Litigation-related and other contingencies, net in 2016 totaled $24.0 million compared to $37.1 million in 2015. Our legal proceedings and other contingent matters are described in more detail in Note 13. Commitments and Contingencies in the accompanying Consolidated Financial Statements included in this report.

Asset impairment charges. Asset impairment charges in 2016 totaled $3,781.2 million compared to $1,140.7 million in 2015. The following items were the significant drivers of impairment charges:

Goodwill

As part of our annual goodwill impairment test, we concluded that the carrying value of our U.S. Generics, Paladin, Somar and Litha reporting units exceeded their respective estimated fair values and recorded goodwill impairment charges of $2,342.5 million, $272.6 million, $33.0 million and $26.3 million, respectively. The impairments were a result of a combination of factors, including increased buying power from the continued consolidation of our generic business customer base, a significant change in the value derived from the level and frequency of anticipated pricing opportunities in the future and increased levels of competition, particularly in our U.S. Generics reporting unit, due to the entry of new low cost competitors and accelerated FDA ANDA approvals. Consequently, we lowered our projected turnover growth rates and profitability levels as part of our fourth quarter company-wide strategic forecasting process. These external dynamics were exacerbated by an increase in the risk factor included in the discount rate used to calculate the U.S. Generics discounted cash flows from the date of our last interim test. The increase in the discount rate was due to the implied control premium resulting from recent trading values of our stock. On a combined basis, these factors reduced the resulting estimated fair value of our reporting units.

Given the results of our intangible asset assessment during the third quarter of 2015 for STENDRA® and certain testosterone replacement therapy (TRT) products, we initiated an interim goodwill impairment analysis of our Urology, Endocrinology and Oncology (UEO) reporting unit as of September 30, 2015. As a result of this interim analysis, we determined that the net book value of our UEO reporting unit exceeded its estimated fair value. We prepared this analysis on a preliminary basis to estimate the amount of a provisional impairment charge as of September 30, 2015, and determined that an impairment was probable and reasonably estimable. We performed the preliminary fair value assessments taking into consideration a number of factors, based upon the latest available information, including the preliminary results of a hypothetical purchase price allocation. As a result of the preliminary analysis, during the three months ended September 30, 2015, we recorded a provisional pre-tax, non-cash impairment charge of $680.0 million in the Consolidated Profit and Loss Account, representing the difference between the estimated implied fair value of the UEO reporting unit's goodwill and its respective net book value. We completed our UEO goodwill impairment analysis during the fourth quarter of 2015 and reduced the provisional pre-tax, non-cash impairment charge by $6.5 million, for a net, pre-tax, non-cash impairment charge during the year ended December 31, 2015 of $673.5 million.

As part of the 2015 annual goodwill impairment test, we recorded a pre-tax, non-cash impairment charge of $85.8 million in the Consolidated Profit and Loss Account during the fourth quarter of 2015, representing the difference between the estimated implied fair value of the Paladin reporting unit's goodwill and its respective net book value, primarily due to the loss of exclusivity on certain products sold in Canada.

Intangible Assets

U.S. Generic Pharmaceuticals Segment

During the three months ended March 31, 2016 and June 30, 2016, we identified certain market conditions impacting the commercial potential of certain indefinite and definite-lived intangible assets in our U.S. Generic Pharmaceuticals segment. Accordingly, we tested these assets for impairment and determined that the carrying value of certain of these assets was no longer fully recoverable, resulting in pre-tax, non-cash asset impairment charges of $29.3 million and $40.0 million during the first and second quarters of 2016, respectively. In addition, during the first quarter of 2016, we recognized pre-tax, non-cash asset impairment charges of $100.3 million related to the 2016 U.S. Generic Pharmaceuticals restructuring initiative, which resulted from the discontinuation of certain commercial products and the abandonment of certain IPR&D projects. See Note 4. Restructuring in the accompanying Consolidated Financial Statements included in this report for discussion of our material restructuring initiatives. During the fourth quarter of 2016, we recognized pre-tax, non-cash intangible asset impairment charges of $507.2 million in our U.S. Generic Pharmaceuticals business resulting from certain market conditions, including higher than expected erosion rates in the U.S. Generic Pharmaceuticals base business due to price erosion and increased competition, that impacted the commercial potential of definite and indefinite-lived intangible assets.

During the year ended December 31, 2015, we identified certain market conditions impacting the commercial potential of certain indefinite and definite-lived intangible assets in our U.S. Generic Pharmaceuticals segment. Accordingly, we tested these assets for impairment and determined that the carrying value of certain of these assets was no longer fully recoverable, resulting in pre-tax, non-cash asset impairment charges of $70.2 million, $72.4 million and $38.4 million, respectively, during the second, third and fourth quarters of 2015.

U.S. Branded Pharmaceuticals Segment

As a result of unfavorable formulary changes and generic competition for sumatriptan, we experienced a downturn in the performance of our Sumavel® DosePro® (Sumavel®) product, a needle-free delivery system for sumatriptan acquired from Zogenix, Inc. in 2014. As a result of this underperformance, we concluded during the third quarter of 2016 that an impairment assessment was required to evaluate the recoverability of Sumavel®. After performing this assessment, we recorded a pre-tax, non-cash impairment charge of $72.8 million during the three months ended September 30, 2016, representing a full impairment of the intangible asset. During the fourth quarter of 2016, we recognized pre-tax, non-cash intangible asset impairment charges of $37.6 million in our U.S. Branded Pharmaceuticals segment resulting primarily from the termination of our BELBUCA™ product and the return of this product to BDSI.

During the year ended December 31, 2015, a sustained downturn in the short-acting TRT market caused underperformance across several of our TRT products, including Testim® and Natesto™. In addition, we also experienced underperformance with respect to STENDRA®. As a result of this underperformance and a re-alignment of investment priorities towards higher growth and higher value assets such as XIAFLEX®, we concluded during the third quarter of 2015 that an impairment assessment was required to evaluate the recoverability of certain definite-lived intangible assets associated with these products. After performing this assessment, we recorded a pre-tax, non-cash impairment charge of approximately $152.0 million during the third quarter of 2015, representing a full impairment of our Natesto™ intangible asset and a partial impairment of our Testim® and STENDRA® intangible assets. As a result of providing written notice to VIVUS Inc. on December 30, 2015 that we were terminating the STENDRA® License Agreement effective June 30, 2016, we recorded an additional pre-tax, non-cash impairment charge of approximately $9.5 million, representing the remaining carrying amount of our STENDRA® intangible asset. Additionally, during the fourth quarter of 2015, we determined that the fair value of certain U.S. Branded Pharmaceuticals IPR&D assets were less than their respective carrying amounts, and we recorded a pre-tax, non-cash impairment charge of $5.5 million representing the full carrying amount of the assets.

International Pharmaceuticals Segment

During the three months ended September 30, 2016, we determined that we would not pursue commercialization of a product in certain international markets. Accordingly, we tested the definite-lived intangible asset associated with this product for impairment and determined that the carrying value was no longer fully recoverable, resulting in pre-tax, non-cash asset impairment charge of $16.2 million during the third quarter of 2016. During the fourth quarter of 2016, we recognized pre-tax, non-cash intangible asset impairment charges of $285.5 million in our International Pharmaceuticals segment resulting from certain market conditions impacting the commercial potential of definite and indefinite-lived intangible assets.

As part of our definite-lived intangible asset impairment review processes for 2015, we recorded pre-tax, non-cash impairment charges of approximately $14.6 million in our International Pharmaceuticals segment, representing the difference between the carrying amount of certain intangible assets and their estimated fair value.

Acquisition-related and integration items. Acquisition-related and integration items in 2016 decreased 17% to $87.6 million from 2015. The decrease during 2016 was primarily driven by lower acquisition-related and integration costs of $106.6 million associated with our Auxilium and Par acquisitions, which closed in 2015. This decrease was partially offset by $23.8 million of expense for 2016, compared to a benefit of $65.6 million for 2015, resulting from changes in the fair value of contingent consideration. The adjustments to contingent consideration were due to changes in market conditions impacting the commercial potential of the underlying products.

Interest expense, net. The components of Interest expense, net for the years ended December 31 are as follows (in thousands):

	2016	2015
Interest expense	$ 456,396	$ 378,901
Interest income	(3,717)	(5,687)
Interest expense, net	$ 452,679	$ 373,214

Interest expense in 2016 totaled $456.4 million compared to $378.9 million in 2015. This increase was primarily attributable to an increase in our average total outstanding indebtedness to $8.4 billion in 2016 from $6.6 billion in 2015. Our period-over-period average total outstanding indebtedness has increased due primarily to the financing of the Par acquisition.

Loss on extinguishment of debt. Loss on extinguishment of debt was zero in 2016 compared to $67.5 million in 2015. The 2015 charges were primarily related to the early redemption of our former 7.00% Senior Notes due 2019.

Other (income) expense, net. The components of Other (income) expense, net for the years ended December 31 are as follows (in thousands):

	2016	2015
Foreign currency loss (gain), net	$ 2,991	$ (23,058)
Equity (earnings) loss from unconsolidated subsidiaries, net	(1,190)	3,217
Other-than-temporary impairment of equity investment	—	18,869
Legal settlement	—	(12,500)
Costs associated with unused financing commitments	—	78,352
Other miscellaneous, net	(2,139)	(1,189)
Other (income) expense, net	$ (338)	$ 63,691

Foreign currency loss (gain), net results from the remeasurement of the our foreign currency denominated assets and liabilities. We incurred $78.4 million during 2015 related to unused commitment fees primarily associated with financing for the Par acquisition. In addition, during 2015, we recognized an other-than-temporary impairment of our Litha joint venture investment totaling $18.9 million, reflecting the excess carrying value of this investment over its estimated fair value.

Income tax benefit. In 2016, we recognized an income tax benefit of $700.1 million on $3,923.9 million of loss of ordinary activities before taxation, compared to a benefit of $1,137.5 million on $1,437.9 million of loss of ordinary activities before taxation in 2015. The effective income tax rate was 17.8% in benefit on the current period loss on ordinary activities before taxation in 2016, compared to an effective income tax rate of 79.1% in benefit on loss on ordinary activities before taxation in 2015. Our tax rate is affected by recurring items, such as tax rates in Non-U.S. jurisdictions as compared to the Notional U.S. federal statutory tax rate, and the relative amount of profit earned in those various jurisdictions. It is also impacted by discrete items that may occur in any given year, but are not consistent from year to year. The following items had the most significant impact on the difference between the notional U.S. statutory federal income tax rate and our effective tax rate:

2016:

- $926.9 million tax expense or a 23.6% rate charge resulting from the non-deductible portion of impaired goodwill.
- $762.6 million tax expense or a 19.4% rate charge from recording net valuation allowances relating to the Group's operations.
- $636.1 million net tax benefit or a 16.2% rate benefit associated with the recognition of outside basis differences in certain subsidiaries.
- $301.7 million net tax benefit or a 7.7% rate benefit associated with our geographical mix of earnings. No provision has been made for Irish taxes, as the majority of our undistributed earnings are intended to be permanently reinvested outside of Ireland.

2015:

- $786.1 million net tax benefit or a 54.7% rate benefit associated with the recognition of outside basis differences in certain subsidiaries.
- $359.5 million net tax benefit or a 25.0% rate benefit associated with our geographical mix of earnings. No provision has been made for Irish taxes, as the majority of our undistributed foreign earnings are intended to be permanently reinvested outside of Ireland.
- $278.3 million tax expense or 19.4% rate charge resulting from the non-deductible portion of impaired goodwill.

For additional information on our income taxes, see Note 18. Income Taxes in the accompanying Consolidated Financial Statements included in this report.

Discontinued operations, net of tax. As a result of our decision to sell our AMS business and wind down our Astora business, together comprising the entirety of our former Devices segment, the operating results of this business are reported as Discontinued operations, net of tax in the Consolidated Profit and Loss Account for all periods presented. The results of our discontinued operations totaled $123.3 million of loss, net of tax, in 2016 compared to $1,194.9 million of loss, net of tax, in 2015.

The change during 2016 was mainly due to a decrease in charges relating to mesh litigation of $1,087.6 million, a decrease in asset impairment charges of $209.4 million and a reduction of income tax expense of $157.4 million derived from tax expense recorded as part of the divestiture of the Men's Health and Prostate Health businesses in the third quarter of 2015, offset partially by a full valuation allowance recorded on certain of our U.S. net deferred tax assets in 2016, a decrease in loss on ordinary activities resulting from the sale of the Men's Health and Prostate Health components in the third quarter of 2015 and a gain on the sale of the Men's Health and Prostate Health components noted above of approximately $13.6 million during the third quarter of 2015.

Business Segment Results Review

The three reportable business segments in which we operate are: (1) U.S. Generic Pharmaceuticals, (2) U.S. Branded Pharmaceuticals and (3) International Pharmaceuticals. These segments reflect the level at which the chief operating decision maker regularly reviews financial information to assess performance and to make decisions about resources to be allocated. Each segment derives turnover from the sales or licensing of its respective products and is discussed in more detail below.

We evaluate segment performance based on each segment's adjusted profit on ordinary activities before taxation, a financial measure not determined in accordance with U.S. GAAP, which we define as loss of ordinary activities before taxation and before certain upfront and milestone payments to partners; acquisition-related and integration items, including transaction costs, earn-out payments or adjustments, changes in the fair value of contingent consideration and bridge financing costs; cost reduction and integration-related initiatives such as separation benefits, retention payments, other exit costs and certain costs associated with integrating an acquired company's operations; excess costs that will be eliminated pursuant to integration plans; asset impairment charges; amortization of intangible assets; stock step-up recorded as part of our acquisitions; certain non-cash interest expense; litigation-related and other contingent matters and gains or losses from early termination of debt; foreign currency gains or losses on intercompany financing arrangements; and certain other items.

Certain of the corporate general and administrative expenses incurred by us are not attributable to any specific segment. Accordingly, these costs are not allocated to any of our segments and are included in the results below as Corporate unallocated. Our consolidated adjusted profit on ordinary activities before taxation is equal to the combined results of each of its segments less these unallocated corporate costs.

We refer to adjusted profit on ordinary activities before taxation in making operating decisions because we believe it provides meaningful supplemental information regarding our operational performance. For instance, we believe that this measure facilitates its internal comparisons to our historical operating results and comparisons to competitors' results. We believe this measure is useful to investors in allowing for greater transparency related to supplemental information used in our financial and operational decision-making. In addition, we have historically reported similar financial measures to our investors and believe that the inclusion of comparative numbers provides consistency in our current financial reporting. Further, we believe that adjusted profit on ordinary activities before taxation may be useful to investors as we are aware that certain of our significant shareholders utilize adjusted profit on ordinary activities before taxation to evaluate our financial performance. Finally, adjusted profit on ordinary activities before taxation is utilized in the calculation of adjusted diluted profit per share, which is used by the Compensation Committee of Endo's board of directors in assessing the performance and compensation of substantially all of our employees, including our executive officers.

There are limitations to using financial measures such as adjusted profit on ordinary activities before taxation. Other companies in our industry may define adjusted profit on ordinary activities before taxation differently than we do. As a result, it may be difficult to use adjusted profit on ordinary activities before taxation or similarly named adjusted financial measures that other companies may use to compare the performance of those companies to our performance. Because of these limitations, adjusted profit on ordinary activities before taxation is not intended to represent cash flow from operations as defined by U.S. GAAP and should not be used as alternatives to net profit as indicators of operating performance or to cash flows as measures of liquidity. We compensate for these limitations by providing reconciliations of our total segment adjusted profit on ordinary activities before taxation to our consolidated loss on ordinary activities before taxation, which is determined in accordance with U.S. GAAP and included in our Consolidated Profit and Loss Account.

Year Ended December 31, 2016 Compared to Year Ended December 31, 2015

Turnover. The following table displays our turnover by reportable segment for the years ended December 31 (dollars in thousands):

	2016		2015	
	$	% of Turnover	$	% of Turnover
Net turnover to external customers:				
U.S. Generic Pharmaceuticals	$ 2,564,613	64	$ 1,672,416	51
U.S. Branded Pharmaceuticals	1,166,294	29	1,284,607	39
International Pharmaceuticals (1)	279,367	7	311,695	10
Total net turnover to external customers	$ 4,010,274	100	$ 3,268,718	100

(1) Turnover generated by our International Pharmaceuticals segment are primarily attributable to Canada, Latin America and South Africa.

U.S. Generic Pharmaceuticals. The following table displays the significant components of our U.S. Generic Pharmaceuticals turnover to external customers for the years ended December 31 (in thousands):

	2016	2015
U.S. Generic Pharmaceuticals		
U.S. Generics Base (1)	$ 1,230,097	$ 1,083,809
Sterile Injectables	530,805	107,592
New Launches and Alternative Dosages (2)	803,711	481,015
Total U.S. Generic Pharmaceuticals	$ 2,564,613	$ 1,672,416

(1) U.S. Generics Base includes solid oral-extended release, solid oral-immediate release and pain/controlled substances products.

(2) New Launches and Alternative Dosages includes liquids, semi-solids, patches, powders, ophthalmics, sprays and new product launches. Products are included in New Launches during the calendar year of launch and the subsequent calendar year such that the period of time any product will be considered a New Launch will range from thirteen to twenty-four months. New Launches contributed $474.5 million of turnover in 2016 compared to $71.3 million of turnover in 2015. The table below presents the most significant turnover producing New Launch Products from the respective most recent two calendar launches years:

Year of Launch	Year Ended December 31, 2016	Year Ended December 31, 2015
2015	- KCL Powder - Ethacrynate Sodium - Dutas/Tams Caps - Propranolol - Pramipexole DHCI	- Ethacrynate Sodium - Pramipexole DHCI - Propranolol - Tolcapone Tabs - Dutas/Tams Caps
2016	- Ezetimibe Tabs - Quetiapine ER - Diclofenac Gel - Melphalan Injection - Darifenacin HBr ER Tabs	N/A - No impact on 2015

Net sales of U.S. Generics Base in 2016 increased 13% to $1,230.1 million from 2015. This increase was attributable to approximately $629.4 million in turnover during 2016 as a result of the acquisition of Par, partially offset by a decrease as a result of competitive pressure on commoditized generic products.

Net sales of Sterile Injectables in 2016 increased 393% to $530.8 million from 2015. This increase was attributable to a full year of turnover from the acquisition of Par, which was acquired in September 2015. Sterile Injectables include net sales of Vasostrict®, the first and only vasopressin injection with a New Drug Application (NDA) approved by the FDA, which was $343.5 million in 2016. In June 2016, the U.S. Patent and Trademark Office issued Endo a new Vasostrict® patent, which has an expiration date of January 30, 2035. Any Abbreviated New Drug Application (ANDA) applicant seeking FDA approval for a generic version of Vasostrict® prior to expiration of the patent has to notify Par of its ANDA filing before it can obtain FDA approval. Any ANDA filer whose application was not received prior to submission of the new patent information would be subject to a 30-month stay of marketing approval by the FDA upon the initiation of Hatch-Waxman litigation by Par against the ANDA filer.

Net sales of New Launches and Alternative Dosages in 2016 increased 67% to $803.7 million from 2015. This increase was primarily attributable to launch products from the Par acquisition, partially offset by increased competitive pressure on patches, ophthalmics and other alternative doses. During the fourth quarter of 2016, we launched Ezetimibe tablets (generic version of Zetia®), which is a first-to-file product with an associated brand value of approximately $2.6 billion, and Quetiapine ER tablets (generic version of Seroquel® XR), which is a first-to-file product with an associated brand value of approximately $1.3 billion. Total combined net sales for these two products in 2016 were approximately $290 million.

U.S. Branded Pharmaceuticals. The following table displays the significant components of our U.S. Branded Pharmaceuticals turnover to external customers for the years ended December 31 (in thousands):

	2016	2015
Pain Management:		
Lidoderm®	$ 87,577	$ 125,269
OPANA® ER	158,938	175,772
Percocet®	139,211	135,822
Voltaren® Gel	100,642	207,161
	$ 486,368	$ 644,024
Specialty Pharmaceuticals:		
Supprelin® LA	$ 78,648	$ 70,099
XIAFLEX®	189,689	158,115
	$ 268,337	$ 228,214
Branded Other Turnover (1)	411,589	412,369
Total U.S. Branded Pharmaceuticals (2)	$ 1,166,294	$ 1,284,607

(1) Products included within Branded Other Turnover in the table above include, but are not limited to, TESTOPEL®, Testim®, Fortesta® Gel, including authorized generic, and Nascobal® Nasal Spray.

(2) Individual products presented above represent the top two performing products in each product category and/or any product having turnover in excess of $100.0 million during the years ended December 31, 2016 or December 31, 2015.

Pain Management

Net sales of Lidoderm® in 2016 decreased 30% to $87.6 million from 2015. This decrease was attributable to volume decreases resulting from generic competition partially offset by an increase in price. Actavis plc (Actavis) (now Teva Pharmaceutical Industries (Teva)), launched a generic form of Lidoderm® in September 2013, our U.S. Generic Pharmaceuticals segment launched its authorized generic of Lidoderm® in May 2014, and Mylan, Inc. (Mylan) launched a generic form of Lidoderm® in August 2015. To the extent additional competitors are able to launch generic versions of Lidoderm®, our turnover could decline further.

Net sales of OPANA® ER in 2016 decreased 10% to $158.9 million from 2015. Net sales continue to be impacted by competing generic versions of the INTAC® technology formulation of OPANA® ER, which launched beginning in early 2013. To the extent additional competitors are able to launch generic versions of the INTAC® technology formulation of OPANA® ER, our turnover could decline further.In March 2017, we announced that the FDA's Drug Safety and Risk Management and Anesthetic and Analgesic Drug Products Advisory Committees (the Committees) voted that the benefits of reformulated OPANA® ER (oxymorphone hydrochloride extended release) no longer outweigh its risks. While several of the Committee members acknowledged the role of OPANA® ER in clinical practice, others believed its benefits are now outweighed by the continuing public health concerns around the product's misuse, abuse and diversion. During the Committees' discussion following the vote, a number of Committee members recommended that OPANA® ER remain on the market with additional regulatory restrictions to mitigate the risks. The FDA convened these Committees to discuss pre- and post-marketing data about the abuse of OPANA® ER, the product's overall risk-benefit profile, as well as the abuse of generic oxymorphone ER and oxymorphone immediate-release products. While the FDA will consider the Committees' vote, any decision regarding whether to take regulatory action rests solely with the FDA.

Net sales of Percocet® in 2016 increased 2% to $139.2 million from 2015. This increase was attributable to price increases, partially offset by volume decreases.

Net sales of Voltaren® Gel in 2016 decreased 51% to $100.6 million from 2015. This decrease was primarily attributable to the March 2016 launch of Amneal Pharmaceuticals LLC's generic equivalent of Voltaren® Gel and our launch of the authorized generic of Voltaren® Gel in July 2016. Subject to FDA approval, it is possible one or more additional competing generic products could potentially enter the market, which could negatively impact future sales of Voltaren® Gel.

Specialty Pharmaceuticals

Net sales of Supprelin® LA in 2016 increased 12% to $78.6 million from 2015. This turnover increase was primarily attributable to volume and price increases.

Net sales of XIAFLEX® in 2016 increased 20% to $189.7 million from 2015. The turnover increase was primarily attributable to volume increases in addition to a full twelve months of product turnover for the year ended December 31, 2016.

Branded Other

Net sales of Branded Other products in 2016 decreased less than 1% to $411.6 million from 2015. The decrease was primarily attributable to decreased Frova® turnover related to generic competition, partially offset by the acquisitions of Auxilium, which we acquired on January 29, 2015 and other branded products acquired with Par.

International Pharmaceuticals. Turnover from our International Pharmaceuticals segment in 2016 decreased 10% to $279.4 million from 2015. The decrease was primarily attributable to decreases in Litha turnover as a result of its divestiture of non-core assets during the first quarter of 2016 in addition to unfavorable fluctuations in foreign currency rates, partially offset by increased turnover from the acquisition of certain Aspen Holdings assets in the fourth quarter of 2015 (the Aspen Asset Acquisition).

Adjusted profit on ordinary activities before taxation. The following table displays our Adjusted profit on ordinary activities before taxation by reportable segment for the years ended December 31 (in thousands):

	2016	2015
Adjusted profit on ordinary activities before taxation:		
U.S. Generic Pharmaceuticals	$ 1,079,479	$ 741,767
U.S. Branded Pharmaceuticals	553,806	694,440
International Pharmaceuticals	84,337	81,789
Total segment adjusted profit on ordinary activities before taxation	$ 1,717,622	$ 1,517,996

U.S. Generic Pharmaceuticals. Adjusted profit on ordinary activities before taxation in 2016 increased 46% to $1,079.5 million from 2015. In 2016, turnover and gross margins increased primarily due to the Par acquisition on September 25, 2015. These increases were partially offset by a decrease resulting from competitive pressure on commoditized generic products and increased charges related to excess stock reserves at our U.S. Generic Pharmaceuticals segment due to the underperformance of certain products.

U.S. Branded Pharmaceuticals. Adjusted profit on ordinary activities before taxation in 2016 decreased 20% to $553.8 million from 2015. This decrease is primarily attributable to decreased Voltaren® Gel, Lidoderm®, OPANA® ER and Frova® turnover related to generic competition.

International Pharmaceuticals. Adjusted profit on ordinary activities before taxation in 2016 increased 3% to $84.3 million from 2015. This increase was primarily attributable to an increase in gross margin resulting from the divestiture of certain lower margin products in the first quarter of 2016, increased turnover from the Aspen Asset Acquisition and decreased operating expenses, partially offset by unfavorable fluctuations in foreign currency rates.

The table below provides reconciliations of our consolidated loss on ordinary activities before taxation, which is determined in accordance with U.S. GAAP, to our total segment adjusted profit on ordinary activities before taxation for the years ended December 31, (in thousands):

	2016	2015
Total consolidated loss on ordinary activities before taxation	$ (3,923,856)	$ (1,437,864)
Interest expense, net	452,679	373,214
Corporate unallocated costs (1)	189,043	171,242
Amortization of intangible assets	876,451	561,302
Stock step-up and certain manufacturing costs that will be eliminated pursuant to integration plans	125,699	249,464
Upfront and milestone payments to partners	8,330	16,155
Separation benefits and other cost reduction initiatives (2)	107,491	125,407
Impact of Voltaren® Gel generic competition	(7,750)	—
Acceleration of Auxilium employee equity awards at closing	—	37,603
Certain litigation-related charges, net (3)	23,950	37,082
Asset impairment charges (4)	3,781,165	1,140,709
Acquisition-related and integration items (5)	87,601	105,250
Loss on extinguishment of debt	—	67,484
Costs associated with unused financing commitments	—	78,352
Other-than-temporary impairment of equity investment	—	18,869
Foreign currency impact related to the remeasurement of intercompany debt instruments	366	(25,121)
Other, net	(3,547)	(1,152)
Total segment adjusted profit on ordinary activities before taxation	$ 1,717,622	$ 1,517,996

(1) Corporate unallocated costs include certain corporate overhead costs, such as headcount and facility expenses, and certain other income and expenses.

(2) Separation benefits and other cost reduction initiatives include employee separation costs of $57.9 million and $60.2 million in 2016 and 2015, respectively. Other amounts in 2016 primarily consist of charges to increase excess stock reserves of $24.5 million and other restructuring costs of $25.1 million, comprised primarily of contract termination fees and building costs. Amounts in 2015 primarily consist of $41.2 million of stock write-offs and $13.3 million of building costs, including a $7.9 million charge recorded upon the cease use date of our Auxilium subsidiary's former corporate headquarters. These amounts were primarily recorded as Cost of sales and Selling, general and administrative expense in our Consolidated Profit and Loss Account. See Note 4. Restructuring in the accompanying Consolidated Financial Statements included this report for discussion of our material restructuring initiatives.

(3) These amounts include charges for Litigation-related and other contingencies, net as further described in Note 13. Commitments and Contingencies in the accompanying Consolidated Financial Statements included in this report.

(4) Asset impairment charges primarily relate to charges to write down goodwill and intangible assets as further described in Note 10. Goodwill and Other Intangibles in the accompanying Consolidated Financial Statements included in this report.

(5) Acquisition-related and integration items include costs directly associated with previous acquisitions of $63.8 million and $170.9 million in 2016 and 2015, respectively. In addition, during the year ended December 31, 2016, there was a charge for changes in fair value of contingent consideration of $23.8 million. During the year ended December 31, 2015, acquisition-related and integration costs are net of a benefit due to changes in the fair value of contingent consideration of $65.6 million.

Liquidity and Capital Resources

Our principal source of liquidity is cash generated from operations. Our principal liquidity requirements are primarily for working capital for operations, licenses, milestone payments, capital expenditures, contingent liabilities, and debt service payments. The Group's working capital deficit was $45.3 million at December 31, 2016 compared to a working capital deficit of $21.8 million at December 31, 2015. Working capital at December 31, 2016 includes restricted cash at bank and in-hand of $276.0 million held in Qualified Settlement Funds (QSFs) for mesh product liability settlement agreements, which is expected to be paid to qualified claimants within the next twelve months. Working capital at December 31, 2015 included restricted at bank and in-hand of $579.0 million held in QSFs for mesh product liability settlement agreements.

We have historically had broad access to financial markets that provide liquidity. Cash at bank and in-hand, which primarily consisted of bank deposits, time deposits and money market accounts, totaled $517.3 million at December 31, 2016 compared to $272.3 million at December 31, 2015.

We expect cash generated from operations together with our cash at bank and in-hand and the revolving credit facilities to be sufficient to cover cash needs for working capital and general corporate purposes, certain contingent liabilities, payment of contractual obligations, principal and interest payments on our indebtedness, capital expenditures, ordinary share repurchases and any regulatory and/or sales milestones that may become due over the next year. However, on a longer term basis, we may not be able to accurately predict the effect of certain developments on the rate of sales growth, such as the degree of market acceptance, patent protection and exclusivity of our products, the impact of competition, the effectiveness of our sales and marketing efforts and the outcome of our current efforts to develop, receive approval for and successfully launch our product candidates. Additionally, we may not be successful in implementing, or may face unexpected changes or expenses in connection with our strategic direction, including the potential for opportunistic corporate development transactions. Any of the above could adversely affect our future cash flows. We may need to obtain additional funding for future transactions, to repay our outstanding indebtedness, or for our future operational needs, and we cannot be certain that funding will be available on terms acceptable to us, or at all. Any issuances of equity securities or convertible securities could have a dilutive effect on the ownership interest of our current shareholders and may adversely impact net profit per share in future periods. An acquisition may be accretive or dilutive and, by its nature, involves numerous risks and uncertainties. As a result of any acquisition efforts, if any, we are likely to experience significant charges to earnings for merger and related expenses (whether or not the acquisitions are consummated) that may include transaction costs, closure costs or costs of restructuring activities.

We consider the undistributed earnings from the majority of our subsidiaries as of December 31, 2016 to be indefinitely reinvested outside of Ireland and, accordingly, neither income tax nor withholding taxes have been provided thereon. As of December 31, 2016, indefinitely reinvested earnings were approximately $157.3 million. We have historically repatriated funds on a tax-free basis to our parent company for stock repurchases and to our Irish and Luxembourg financing companies to repay debt. Accordingly, we do not anticipate incurring tax in deploying funds to satisfy liquidity needs arising in the ordinary course of our business.

Borrowings. At December 31, 2016, the Group's indebtedness includes a credit agreement with combined outstanding principal borrowings of $3,713.9 million and additional availability of approximately $997.4 million under the revolving credit facilities.

The credit agreement contains affirmative and negative covenants that the Group believes to be usual and customary for a senior secured credit facility. The negative covenants include, among other things, limitations on capital expenditures, asset sales, mergers and acquisitions, indebtedness, liens, dividends, investments and transactions with the Group's affiliates. As of December 31, 2016, we were in compliance with all such covenants. In addition, on an annual basis commencing with the year ended December 31, 2016, the Group is required to perform a calculation of excess cash flow (as defined in the Amended Credit Agreement), which may result in an accelerated payment of the principal amount. The excess cash flow calculation for the year ended December 31, 2016 did not result in an excess payment.

The Group intends to repay the amounts owed under this credit agreement on April 27, 2017 and concurrently enter into a new five-year revolving credit facility in a principal amount of approximately $1,000.0 million and (ii) a seven-year term loan facility in a principal amount of approximately $3,415.0 million.

At December 31, 2016, the Group's indebtedness includes senior notes with aggregate principal amounts totaling $4.7 billion. These notes mature between 2022 and 2025, subject to earlier repurchase or redemption in accordance with the terms of the respective indentures. Interest rates on these notes range from 5.375% to 7.25%. These notes are senior unsecured obligations of the Group's subsidiaries and are issued or guaranteed on a senior unsecured basis, as applicable, by all of our significant subsidiaries (other than Astora, Somar and Litha) and certain of our other subsidiaries, except for the 7.25% Senior Notes due 2022, which are issued by Endo Health Solutions Inc. and guaranteed on a senior unsecured basis by the guarantors named in the Fifth Supplemental Indenture relating to such notes.

The indentures governing our various senior notes contain affirmative and negative covenants that the Group believes to be usual and customary for senior unsecured indentures. The negative covenants, among other things, restrict the Group's ability and the ability of its restricted subsidiaries to incur certain additional indebtedness and issue preferred stock, make restricted payments, sell certain assets, agree to any restrictions on the ability of restricted subsidiaries to make payments to us, create certain liens, merge, consolidate, or sell substantially all of the Group's assets, or enter into certain transactions with affiliates. As of December 31, 2016, we were in compliance with all covenants.

The Group intends to issue $300.0 million in aggregate principal amount of 5.875% senior secured notes due 2024 (the 2024 Notes) on April 27, 2017.

Credit ratings. The Group's corporate credit ratings assigned by Moody's Investors Service and Standard & Poor's are B1 with a negative outlook and B+ with a negative outlook, respectively.

Working capital. The components of our working capital and our liquidity at December 31, 2016 and 2015 are below (dollars in thousands):

	December 31, 2016	December 31, 2015
Total current assets	$ 2,589,459	$ 3,452,537
Less: total current liabilities	(2,634,745)	(3,474,312)
Working capital	$ (45,286)	$ (21,775)
Current ratio	-1.0:1	-1.0:1

Net working capital decreased by approximately $24 million from December 31, 2015 to December 31, 2016. Since December 31, 2015, our current assets have decreased by $863 million. Changes in current assets impacting working capital were largely driven by a $197 million decrease in stock resulting from continued amortization of stock step-up related to our recent business acquisitions and excess stock reserves recorded during the year ended December 31, 2016 and a $304 million net differential between cash distributions made from the QSFs to mesh-related product liability claimants and cash distributions into the QSFs. The remaining changes in current assets did not have a significant impact on working capital. Since December 31, 2015, our current liabilities have decreased by $840 million. Changes in current liabilities impacting working capital were driven largely by a $591 million decrease in the current portion of our legal settlement accrual as a result of cash distributions made from the QSFs of $1.1 billion during 2016, partially offset by $549 million of our long-term legal settlement accrual shifting into short-term between 2015 and 2016. In addition, accounts payable and accrued liabilities decreased by approximately $56 million, primarily associated with decreased gross to net reserves in our U.S. Branded Pharmaceuticals business. The remaining changes in current liabilities did not have a significant impact on working capital.

The following table summarizes our Consolidated Statements of Cash Flows for the years ended December 31 (in thousands):

	2016	2015
Net cash flow provided by (used in):		
Operating activities	$ 524,439	$ 62,026
Investing activities	125,861	(6,244,770)
Financing activities	(393,982)	6,055,467
Effect of foreign exchange rate	328	(7,068)
Movement in cash held for sale	(11,744)	997
Net increase in cash at bank and in-hand	$ 244,902	$ (133,348)

Net cash provided by operating activities. Net cash provided by operating activities was $524.4 million in 2016 compared to $62.0 million in 2015.

Net cash provided by operating activities represents the cash receipts and cash disbursements from all of our activities other than investing activities and financing activities. Changes in cash from operating activities reflect, among other things, the timing of cash collections from customers, payments to suppliers, managed care organizations, government agencies, collaborative partners and employees, as well as tax payments and refunds in the ordinary course of business.

The $462.4 million increase in Net cash provided by operating activities in 2016 compared to 2015 was primarily the result of $760.0 million U.S. federal income tax refunds received during 2016, offset partially by the timing of cash collections and cash payments related to our operations.

The following table summarizes certain of our significant pre-tax cash outlays and cash receipts impacting Net cash provided by operating activities for the years ended December 31 (in thousands):

	2016	2015
Payments for mesh-related product liability and other litigation matters	$ 1,195,932	$ 699,347
Redemption fees paid in connection with debt retirements	—	31,496
Unused commitment fees	—	78,352
Separation and restructuring payments	97,869	73,655
Excise tax reimbursement	—	—
Transaction costs and certain integration charges paid in connection with acquisitions	68,249	191,195
U.S. Federal tax refunds received	(759,950)	(162,821)
Total	$ 602,100	$ 911,224

Net cash provided by (used in) investing activities. Net cash provided by investing activities was $125.9 million in 2016 compared to $6,244.8 million used in investing activities in 2015.

This $6,370.6 million fluctuation in cash provided by investing activities in 2016 compared to 2015 relates primarily to the cash used for acquisitions in 2015 of $7,650.4 million. In addition, $1,134.7 million of cash was released from the QSFs for mesh settlements during the year ended December 31, 2016, which was $485.3 million more than cash released from the QSFs during the prior year. These net increases were partially offset by a decrease of $1,584.7 million in proceeds from sale of business, primarily relating to the sale of the Men's Health and Prostate Health components of the AMS business during the third quarter of 2015, and $831.1 million paid into QSFs for mesh settlements during the year ended December 31, 2016, which was $88.0 million more than cash paid into the QSFs during the prior year. Additionally, during the year ended December 31, 2015, $40 million of cash was released from the escrow account associated with the acquisition of the remaining outstanding share capital of Litha. Cash payments into QSFs and escrow accounts result in a cash outflow for investing activities. Cash releases from QSFs and escrow accounts result in a cash inflow for investing activities and a corresponding outflow for cash provided by (used in) operating activities. Payments related to our QSFs are further described in Note 13. Commitments and Contingencies in the accompanying Consolidated Financial Statements in this report.

Net cash (used in) provided by financing activities. Net cash used in financing activities was $394.0 million in 2016 compared to $6,055.5 million provided by financing activities in 2015.

Items contributing to the $6,449.4 million fluctuation in cash used in financing activities in 2016 compared to 2015 include a decrease resulting from proceeds from the issuance of notes of $2,835.0 million in 2015, a decrease due to proceeds from the issuance of term loans of $2,800.0 million in 2015, a decrease resulting from the issuance of ordinary shares of $2,300.0 million in 2015, a decrease in proceeds from draw of revolving debt of $145.0 million**,** and an increase in repayments of revolving debt of $305.0 million, partially offset by a decrease in principal payments on notes of $899.9 million, a decrease in principal payments on term loans of $369.8 million, a decrease due to the repurchase of convertible notes of $247.8 million in 2015, and a decrease resulting from payments for deferred financing fees of $124.6 million in 2015.

Research and development. Over the past few years, we have incurred significant expenditures related to conducting clinical studies to develop new products and expand the value of our existing products beyond what is currently approved in their respective labels.

As part of the Auxilium acquisition, the Group acquired Auxilium's licensed right to cover certain XIAFLEX® indications. As a result, the Group has incurred related early-stage and middle-stage development expenses for these XIAFLEX® indications.

We expect to incur research and development expenditures relative to the development and advancement of our current generic and branded product pipeline and any additional product candidates we may add via license, acquisition or organically. There can be no assurance the results of any ongoing or future nonclinical or clinical trials related to these projects will be successful, that additional trials will not be required, that any drug, product or indication under development will receive regulatory approval in a timely manner or at all, or that such drug, product or indication could be successfully manufactured in accordance with current good manufacturing practices for the geographies where the products are approved, successfully marketed in a timely manner, or at all, or that we will have sufficient funds to develop or commercialize any of our products.

Manufacturing, supply and other service agreements. Certain of our subsidiaries contract with various third party manufacturers, suppliers and service providers to provide raw materials used in our subsidiaries' products and semi-finished and finished goods, as well as certain packaging, labeling, customer service support, warehouse and distribution services. These contracts include agreements with Novartis Consumer Health, Inc., Novartis AG and Sandoz, Inc. (collectively, Novartis), Teikoku Seiyaku Co., Ltd., Noramco, Inc., Grünenthal GmbH and Jubilant HollisterStier Laboratories LLC. If, for any reason, our subsidiaries are unable to obtain sufficient quantities of any of the finished goods or raw materials or components required for their products needed to conduct their business, it could have an adverse effect on our business, financial condition, results of operations and cash flows.

License and collaboration agreements. Our subsidiaries have agreed to certain contingent payments in certain license, collaboration and other agreements. Payments under these agreements generally become due and payable only upon the achievement of certain developmental, regulatory, commercial and/or other milestones. Due to the fact that it is uncertain if and when these milestones will be achieved, such contingencies have not been recorded in our Consolidated Balance Sheets. In addition, under certain arrangements, we or our subsidiaries may have to make royalty payments based on a percentage of future sales of the products in the event regulatory approval for marketing is obtained. From a business perspective, we view these payments favorably as they signify that the products are moving successfully through the development phase toward commercialization.

Acquisitions. Going forward, our primary focus will be on organic growth. However, we may consider and, as appropriate, make acquisitions of other businesses, products, product rights or technologies. Our cash reserves and other liquid assets may be inadequate to consummate such acquisitions and it may be necessary for us to issue ordinary shares or raise substantial additional funds in the future to complete future transactions. In addition, as a result of any acquisition efforts, we are likely to experience significant charges to earnings for merger and related expenses (whether or not our efforts are successful) that may include transaction costs, closure costs or costs of restructuring activities.

Legal proceedings. We are subject to various patent, product liability, government investigations and other legal proceedings in the ordinary course of business. Accruals are recorded when we determine that a loss related to a litigation matter is both probable and reasonably estimable. Due to the fact that legal proceedings and other contingencies are inherently unpredictable, our assessments involve significant judgments regarding future events. For additional discussion of legal proceedings, see Note 13. Commitments and Contingencies in the accompanying Consolidated Financial Statements in this report.

Contractual Obligations. The following table lists our enforceable and legally binding noncancelable obligations as of December 31, 2016.

	Payment Due by Period (in thousands)						
Contractual Obligations	**Total**	**2017**	**2018**	**2019**	**2020**	**2021**	**Thereafter**
Long-term debt obligations (1)	$ 8,398,930	$ 131,125	$ 179,250	$ 715,500	$ 28,000	$ 28,000	$ 7,317,055
Interest expense (2)	2,474,242	416,817	411,748	387,972	383,442	382,075	492,188
Capital lease obligations (3)	62,308	8,591	7,269	7,368	7,360	7,542	24,178
Operating lease obligations (4)	91,588	17,531	16,295	14,158	11,923	9,386	22,295
Purchase obligations (5)	71,794	55,274	7,143	2,717	2,440	1,313	2,907
Mesh-related product liability settlements (6)	674,078	674,078	—	—	—	—	—
Other obligations and commitments (7)	10,500	3,500	3,500	500	500	500	2,000
Total (8)	$ 11,783,440	$ 1,306,916	$ 625,205	$ 1,128,215	$ 433,665	$ 428,816	$ 7,860,623

(1) Includes minimum cash payments related to principal associated with our indebtedness. A discussion of such indebtedness is included above under the caption "Borrowings".

(2) These amounts represent future cash interest payments related to our existing debt obligations based on fixed and variable interest rates specified in the associated debt agreements. Payments related to variable debt are based on applicable rates at December 31, 2016 plus the specified margin in the associated debt agreements for each period presented.

(3) Includes minimum cash payments related to certain fixed assets, primarily related to technology. In addition, includes minimum cash payments related to the direct financing arrangement for our U.S. headquarters in Malvern, Pennsylvania. We have agreed to sublease a portion of the Malvern facility, equal to approximately 90,000 square feet, through December 31, 2024. We will receive approximately $20.0 million in minimum rental payments over the remaining term of the sublease, which is not included in the table above.

(4) Includes minimum cash payments related to our leased automobiles, machinery and equipment and facilities not included in capital lease obligations. Under the terms of our leases for our former headquarters in Chadds Ford, Pennsylvania, the former Auxilium headquarters in Chesterbrook, Pennsylvania, and the former AMS headquarters in Eden Prairie, Minnesota, we are required to continue to pay all future minimum lease payments to the landlord. We have agreed to sublease the entire Chadds Ford facility through March 31, 2018 and the entire Eden Prairie facility through December 21, 2020. We will receive approximately $2.8 million in minimum rental payments over the remaining terms of the subleases, which is not included in the table above.

(5) Purchase obligations are enforceable and legally binding obligations for purchases of goods and services including minimum stock contracts.

(6) The amount included above represents contractual payments for mesh-related product liability settlements pursuant to existing Master Settlement Agreements (MSAs) and reflect the earliest date that a settlement payment could be due and the largest amount that could be due on that date. These matters are described in more detail in Note 13. Commitments and Contingencies in the accompanying Consolidated Financial Statements in this report.

(7) Other obligations and commitments include agreements to purchase third-party assets, products and services and other minimum royalty obligations.

(8) Total does not include contractual obligations already included in current liabilities on our Consolidated Balance Sheets, except for current portion of long-term debt, short-term capital lease obligations, short-term royalty obligations and the current portion of the mesh-related product liability or certain purchase obligations, which are discussed below.

For purposes of the table above, obligations for the purchase of goods or services are included only for significant noncancelable purchase orders at least one year in length that are enforceable, legally binding and specify all significant terms, including fixed or minimum quantities to be purchased, fixed, minimum or variable price provisions and the timing of the obligation. Our purchase orders are based on our current manufacturing needs and are typically fulfilled by our suppliers within a relatively short period. At December 31, 2016, we have open purchase orders that represent authorizations to purchase rather than binding agreements that are not included in the table above. In addition, we do not include collaboration agreements and potential payments under those agreements or potential payments related to contingent consideration.

As of December 31, 2016, our liability for unrecognized tax benefits amounted to $443.6 million (including interest and penalties). Due to the nature and timing of the ultimate outcome of these uncertain tax positions, we cannot make a reliable estimate of the amount and period of related future payments. Therefore, our liability has been excluded from the above contractual obligations table.

Fluctuations. Our quarterly results have fluctuated in the past and may continue to fluctuate. These fluctuations may be due to the timing of new product launches, purchasing patterns of our customers, market acceptance of our products, the impact of competitive products and pricing, asset impairment charges, litigation related charges, restructuring costs, including separation benefits, business combination transaction costs, upfront, milestone and certain other payments made or accrued pursuant to licensing agreements and changes in the fair value of financial instruments and contingent assets and liabilities recorded as part of a business combination. Further, a substantial portion of our total turnover is through three wholesale drug distributors who in turn supply our products to pharmacies, hospitals and physicians. Accordingly, we are potentially subject to a concentration of credit risk with respect to our trade receivables.

Growth opportunities. We continue to evaluate growth opportunities including investments, licensing arrangements, acquisitions of product rights or technologies and businesses, and strategic alliances and promotional arrangements which could require significant capital resources. We continue to focus our business development activities on further diversifying our turnover base through product licensing and company acquisitions, as well as other opportunities to enhance shareholder value. Through execution of our business strategy we focus on developing new products both internally and with contract and collaborative partners; expanding our product lines by acquiring new products and technologies, increasing turnover and earnings through sales and marketing programs for our innovative product offerings and effectively using our resources; and providing additional resources to support our businesses.

Non-U.S. operations. Fluctuations in foreign currency rates resulted in a net loss of $3.0 million in 2016. This compares to a net gain of $23.1 million in 2015.

Inflation. We do not believe that inflation had a material adverse effect on our financial statements for the periods presented.

Off-balance sheet arrangements. We have no off-balance sheet arrangements.

Financial Risk Management

Interest Rate Risk

Our exposure to interest rate risk relates primarily to our variable rate indebtedness associated with the term loan portion and revolving credit facilities portion of our credit agreement. To the extent we utilize amounts under our term loans and revolving credit facilities, we would be exposed to additional interest rate risk. At December 31, 2016, our term loans include principal amount of floating-rate debt of $3.7 billion. We had no principal amounts of floating-rate debt outstanding on our revolving credit facilities as of December 31, 2016. Borrowings under our revolving credit facilities and our Term Loan A facility bear interest at a rate equal to an applicable margin plus London Interbank Offered Rate (LIBOR). In addition, borrowings under our Term Loan B facility bear interest at a rate equal to an applicable margin plus LIBOR, subject to a LIBOR floor of 0.75%. A hypothetical 1% increase in LIBOR over the 0.75% floor would result in $37.1 million in incremental annual interest expense.

As of December 31, 2016 and 2015, we had no other assets or liabilities with significant interest rate sensitivity.

Investment Risk

At December 31, 2016 and 2015, we had immaterial investments in available-for-sale securities, primarily associated with equity securities of publicly traded companies. Any decline in value below our original investments will be evaluated to determine if the decline in value is considered temporary or other-than-temporary. An other-than-temporary decline in fair value would be included as a charge to earnings.

Foreign Currency Risk

We operate and transact business in various foreign countries and are therefore subject to risks associated with foreign currency exchange rate fluctuations. The Group manages this foreign currency risk, in part, through operational means including managing foreign currency turnover in relation to same currency costs as well as managing foreign currency assets in relation to same currency liabilities. The Group is also exposed to the potential earnings effects from intercompany foreign currency assets and liabilities that arise from normal trade receivables and payables and other intercompany loans. These subsidiaries' financial statements are remeasured into their respective functional currencies using current or historical exchange rates. Such remeasurement adjustments could have an adverse effect on the Group's results of operations.

All assets and liabilities of our international subsidiaries, which maintain their financial statements in local currency, are translated to U.S. dollars at period-end exchange rates. Translation adjustments arising from the use of differing exchange rates are included in other reserves in shareholders' funds. Gains and losses on foreign currency transactions and short term intercompany receivables from foreign subsidiaries are included in Other (income) expense, net.

Fluctuations in foreign currency rates resulted in a net loss of $3.0 million in 2016. This compares to a net gain of $23.1 million in 2015.

Based on the Group's significant foreign currency denominated intercompany loans existing at December 31, 2016, we estimate that a 10% appreciation or depreciation in the underlying currencies of our foreign currency denominated intercompany loans, relative to the U.S. Dollar, would result in approximately $7.0 million in incremental foreign currency gains or losses, respectively.

Principal Risks

We operate in a highly competitive industry.

The pharmaceutical industry is intensely competitive, and we face competition in our branded and generic pharmaceutical business. In addition to product development, safety, efficacy, commercialization, marketing and promotion, other competitive factors include product quality and price, reputation, service and access to scientific and technical information. Many of our competitors, including Abbott, Allergan, Purdue, Jazz, Shire, Horizon, Mallinckrodt, Teva, Mylan, Sandoz and Impax, among others, may have greater resources than we do and we cannot predict with certainty the timing or impact of competitors' products. Furthermore, recent trends in this industry are toward further market consolidation of large drug companies into a smaller number of very large entities, further concentrating financial, technical and market strength and increasing competitive pressure in the industry. It is possible that our competitors may make greater research and development investments and have more efficient or superior processes and systems and that their new products may make our products or technologies uncompetitive or obsolete. Furthermore, academic institutions, government agencies and other public and private organizations conducting research may seek patent protection and may establish collaborative arrangements for competitive products or programs. If we fail to compete successfully, our business, results of operations, financial condition and cash flows could be materially adversely affected.

Our branded products face competition from generic versions. Generic versions are generally significantly cheaper than branded versions and, where available, may be required or encouraged in place of the branded version under third-party reimbursement programs, or substituted by pharmacies for branded versions by law. The entrance of generic competition to our branded products generally reduces our market share and adversely affects our profitability and cash flows. Further, certain Asian and other overseas generic competitors may be able to produce products at costs lower than the costs of domestic manufacturers. If we experience substantial competition from Asian or other overseas generic competitors with lower production costs, our profit margins will suffer. In addition, certain of our branded products are not protected by patent rights or have limited patent life and will soon lose patent protection. Loss of patent protection for a branded product typically is followed promptly by generic substitutes. As a result, sales of many of these branded products may decline or stop growing over time. Generic competition with our branded products has had and will continue to have a material adverse effect on the net sales and profitability of our branded products.

In addition, our generics business faces competition from brand-name pharmaceutical companies, which have taken aggressive steps to thwart or delay competition from generic equivalents of their brand-name products. The actions taken by competing brand name pharmaceutical companies may increase the costs and risks associated with our efforts to introduce generic products and may delay or prevent such introduction altogether.

Our sales may also suffer as a result of changes in consumer demand for our products, including those related to fluctuations in consumer buying patterns tied to seasonality or the introduction of new products by competitors, which could have a material adverse effect on our business, results of operations, financial conditions and cash flows.

If generic manufacturers use litigation and regulatory means to obtain approval for generic versions of our branded drugs, our sales may suffer.

Under the Hatch-Waxman Act, the U.S. Food and Drug Administration (FDA) can approve an Abbreviated New Drug Application (ANDA) for a generic bioequivalent version of a previously approved drug, without requiring the ANDA applicant to undertake the full clinical testing necessary to obtain approval to market a new drug. In place of such clinical studies, an ANDA applicant usually needs only to submit data demonstrating that its generic product is bioequivalent to the branded product.

Various generic manufacturers have filed ANDAs seeking FDA approval for generic versions of certain of our key pharmaceutical products, including but not limited to Lidoderm®, both formulations of OPANA® ER, Aveed® and Megace *ES*®. In connection with such filings, these manufacturers have challenged the validity and/or enforceability of one or more of the underlying patents protecting our products. In the case of Lidoderm® and Megace *ES*®, we no longer have patent protection in the markets where we sell these products. Our turnover from Lidoderm® have been negatively affected by Actavis's September 2013 launch and Mylan's August 2015 launch of their lidocaine patch 5%, generic versions of Lidoderm®, and we anticipate that these turnover could decrease further should one or more additional generic versions launch. With respect to OPANA® ER, Aveed® and other branded pharmaceutical products, it has been and continues to be our practice to vigorously defend and pursue all available legal and regulatory avenues in defense of the intellectual property rights protecting our products. Despite our efforts to defend our products, litigation is inherently uncertain, and we cannot predict the timing or outcome of our efforts. If we are not successful in defending our intellectual property rights or opt to settle, or if a product's marketing exclusivity rights expire or become otherwise unenforceable, our competitors could ultimately launch generic versions of our products, which could significantly decrease our turnover and could have a material adverse effect on our business, results of operations, financial condition and cash flows as well as our share price. For a complete description of the related legal proceedings, see Note 13. Commitments and Contingencies in the accompanying Consolidated Financial Statements included in this report. As a result, there are currently ongoing legal proceedings brought by us and/or our subsidiaries, and in certain cases our third party partners, against manufacturers seeking FDA approval for generic versions of our products.

If we fail to obtain exclusive marketing rights for our generic pharmaceutical products or fail to introduce these generic products on a timely basis, our turnover, gross margin and operating results may decline.

The Hatch-Waxman amendments to the Federal Food, Drug, and Cosmetic Act provide for a period of 180 days of marketing exclusivity for a generic version of a previously approved drug for any applicant that is first-to-file an ANDA containing a certification of invalidity, non-infringement or unenforceability related to a patent listed with respect to the corresponding brand-name drug (commonly referred to as a "Paragraph IV certification"). A large portion of our turnover for our U.S. Generic Pharmaceuticals segment have been derived from the sales of generic drugs during such 180-day marketing exclusivity period permitted under the Hatch-Waxman Act and from the sale of other generic products for which there otherwise is limited competition. ANDAs that contain Paragraph IV certifications challenging patents, however, generally become the subject of patent litigation that can be both lengthy and costly. There is no certainty that we will prevail in any such litigation, that we will be the first-to-file and be granted the 180-day marketing exclusivity period, or, if we are granted the 180-day marketing exclusivity period, that we will not forfeit such period. Even where we are awarded marketing exclusivity, we may be required to share our exclusivity period with other ANDA applicants who submit Paragraph IV certifications. In addition, brand-name pharmaceutical companies often authorize a generic version of the corresponding brand-name drug to be sold during any period of marketing exclusivity that is awarded (described further below). Furthermore, timely commencement of the litigation by the patent owner imposes an automatic stay of ANDA approval by the FDA for 30 months, unless the case is decided in the ANDA applicant's favor during that period. Finally, if the court decision is adverse to the ANDA applicant, the ANDA approval will be delayed until the challenged patent expires, and the applicant will not be granted the 180-day marketing exclusivity.

The future profitability of our U.S. Generic Pharmaceutical segment depends, to a significant extent, upon our ability to introduce, on a timely basis, new generic products that are either the first-to-market (or among the first-to-market) or that otherwise can gain significant market share during the 180-day marketing period as permitted by the Hatch-Waxman Act. Our ability to timely bring our products to market is dependent upon, among other things, the timing of regulatory approval of our products, which to a large extent is outside of our control, as well as the timing of competing products. Our turnover and future profitability are dependent, in large part, upon our ability or the ability of our development partners to file, timely and effectively, ANDAs with the FDA or to enter into contractual relationships with other parties that have obtained marketing exclusivity. No assurances can be given that we will be able to develop and introduce commercially successful products in the future within the time constraints necessary to be successful. If we or our development partners are unable to continue to timely and effectively file ANDAs with the FDA or to partner with other parties that have obtained marketing exclusivity, our turnover and operating results may decline significantly and our prospects and business may be materially adversely affected.

We may be the subject of product liability claims or product recalls, and we may be unable to obtain or maintain insurance adequate to cover potential liabilities.

Our business exposes us to significant potential risk from product liability claims, other significant litigation matters, government investigations or product recalls, including, but not limited to, such matters associated with the testing, manufacturing, marketing and sale of our products. We have been in the past, and continue to be, subject to various product liability cases, other litigations and government investigations. In addition to direct expenditures for damages, settlement and defense costs, there is a possibility of adverse publicity, loss of turnover and disruption of business as a result of product liability claims or other litigation matters. Some plaintiffs have received substantial damage awards in some jurisdictions against pharmaceutical and/or medical device companies based upon claims for injuries allegedly caused by the use of their products. In addition, in the age of social media, plaintiffs' attorneys have a wide variety of tools to advertise their services and solicit new clients for litigation. Thus, we could expect that any significant product liability litigation or mass tort in which we are a defendant will have a larger number of plaintiffs than such actions have seen historically because of the increasing use of wide-spread and media-varied advertising. In addition, it may be necessary for us to voluntarily or mandatorily recall or withdraw products that do not meet approved specifications or which subsequent data demonstrate may be unsafe or ineffective or misused. Any such recall or withdraw could result in adverse publicity, costs connected to the recall and loss of turnover. If we are found liable on a product liability claim or series of claims, defaults could be declared under our debt agreements, we could suffer reputational damage, and we could incur losses, any of which could materially and adversely impact our business, financial condition, results of operations and cash flows.

Our pharmaceutical and medical device products may cause, or may appear to cause, serious adverse side effects or potentially dangerous drug interactions if misused, improperly prescribed or subject to faulty surgical technique. For example, we and/or certain of our subsidiaries, have been named as defendants in multiple lawsuits in various federal and state courts alleging personal injury resulting from use of transvaginal surgical mesh products designed to treat pelvic organ prolapse and stress urinary incontinence. Through our Astora Women's Health Business (Astora), we and certain plaintiffs' attorneys representing mesh-related product liability claimants have entered into various Master Settlement Agreements (MSAs) regarding settling up to approximately 49,000 filed and unfiled mesh claims handled or controlled by the participating attorneys. These MSAs, which were executed at various times since June 2013, were entered into solely by way of compromise and settlement and are not in any way an admission of liability or fault by us and/or any of our subsidiaries. As of December 31, 2016, our product liability accrual for vaginal mesh cases totaled $963.1 million for all known claims for which a liability is probable. We may be subject to additional liabilities arising out of these claims, and are responsible for the cost of managing these claims. In addition to claims covered by MSAs, we are currently aware of approximately 10,500 claims that have been filed, asserted or that we believe are likely to be asserted that have not been accrued for because we lack sufficient information to determine whether any potential loss is probable. In addition, there may be other claims asserted in the future. It is currently not possible to estimate the number or validity of any such future claims. Although we believe there is a reasonable possibility that a loss in excess of the amount recognized exists, we are unable to estimate the possible loss or range of loss in excess of the amount accrued at this time.

We cannot confirm to you that we will be able to obtain or maintain product liability insurance in the future on acceptable terms or with adequate coverage against potential liabilities or other losses such as the cost of a recall if any claim is brought against us, regardless of the success or failure of the claim. For example, we no longer have product liability insurance to cover the claims in connection with the mesh-related litigation described above. Additionally, we may be limited by the surviving insurance policies of our acquired subsidiaries, which may not be adequate to cover against potential liabilities or other losses. The failure to generate sufficient cash flow or to obtain other financing could affect our ability to pay the amounts due under those liabilities not covered by insurance. See Note 13. Commitments and Contingencies in the accompanying Consolidated Financial Statements included in this report for further discussion of our product liability claims.

Our ability to protect and maintain our proprietary and licensed third party technology, which is vital to our business, is uncertain.

Our success, competitive position and future profit will depend in part on our ability to obtain and protect patent rights relating to the technologies, processes and products we have developed and are currently developing and may develop in the future. Our policy is to seek patent protection for technologies, processes and products we own and to enforce the intellectual property rights we own and license. We cannot confirm to you that patent applications we submit and have submitted will result in patents being issued. If an invention qualifies as a joint invention, the joint inventor may have rights in the invention and we cannot confirm to you that the joint inventor will protect the intellectual property rights to the joint invention. We cannot confirm to you that a third party will not infringe upon, design around or develop uses not covered by any patent issued or licensed to us or that these patents will otherwise be commercially viable. In this regard, the patent position of pharmaceutical compounds and compositions is particularly uncertain. Even issued patents may later be modified or revoked by the PTO, by analogous foreign offices or in legal proceedings. Upon the expiration or loss of necessary intellectual property protection for a product, others may manufacture and distribute our patented products, which will result in a loss of a significant portion of our sales of that product.

In addition, our success, particularly in our branded businesses, depends in part on the ability of our partners and suppliers to obtain, maintain and enforce patents, and protect trademarks, trade secrets, know-how, and other intellectual property and proprietary information. Our ability to commercialize any branded product successfully will largely depend upon our or any partner's or supplier's ability to obtain and maintain patents and trademarks of sufficient scope to lawfully prevent third-parties from developing and/or marketing infringing products.

We cannot confirm to you as to the degree of protection any patents will afford, including whether the protection obtained will be of sufficient breadth and degree to protect our commercial interests in all the countries where we conduct business. Furthermore, we cannot confirm to you that our products will not infringe the patents or other intellectual property rights held by third parties. If we infringe the intellectual property rights of others, we could lose our right to develop, manufacture or sell products or we could be required to pay monetary damages or royalties to license proprietary rights from third parties. An adverse determination in a judicial or administrative proceeding or a failure to obtain necessary licenses could prevent us from manufacturing or selling our products.

The Group also relies on trade secrets and other un-patented proprietary information, which it generally seeks to protect by confidentiality and nondisclosure agreements with its employees, consultants, advisors and partners. These agreements may not effectively prevent disclosure of confidential information and may not provide the Group with an adequate remedy in the event of unauthorized disclosure. In addition, if the Group's employees, scientific consultants or partners develop inventions or processes that may be applicable to the Group's products under development, such inventions and processes will not necessarily become the Group's property, but may remain the property of those persons or their employers.

Our competitors or other third parties may allege that we are infringing their intellectual property, forcing us to expend substantial resources in litigation, the outcome of which is uncertain. Any unfavorable outcome of such litigation, including losses related to "at-risk" product launches, could have a material adverse effect on our business, financial position and results of operations.

Companies that produce branded pharmaceutical products routinely bring litigation against ANDA or similar applicants that seek regulatory approval to manufacture and market generic forms of their branded products alleging patent infringement or other violations of intellectual property rights. Patent holders may also bring patent infringement suits against companies that are currently marketing and selling approved generic products. Litigation often involves significant expense and can delay or prevent introduction or sale of our generic products. If patents are held valid, enforceable and infringed by our products, we would, unless we could obtain a license from the patent holder, need to delay selling our corresponding generic product and, if we are already selling our product, cease selling and potentially destroy existing product stock.

There may be situations in which we may make business and legal judgments to market and sell products that are subject to claims of alleged patent infringement prior to final resolution of those claims by the courts, based upon our belief that such patents are invalid, unenforceable, or are not infringed by our marketing and sale of such products. This is referred to in the pharmaceutical industry as an "at-risk" launch. The risk involved in an at-risk launch can be substantial because, if a patent holder ultimately prevails against us, the remedies available to such holder may include, among other things, damages measured by the profits lost by the patent holder, which can be significantly higher than the profits we make from selling the generic version of the product. Moreover, if a court determines that such infringement is willful, the damages could be subject to trebling. We could face substantial damages from adverse court decisions in such matters. We could also be at risk for the value of such stock that we are unable to market or sell.

Agreements between branded pharmaceutical companies and generic pharmaceutical companies are facing increased government scrutiny in the U.S. and abroad.

We are involved in numerous patent litigations in which generic companies challenge the validity or enforceability of our products' listed patents and/or the applicability of these patents to the generic applicant's products. Likewise, our U.S. Generic Pharmaceuticals segment is also involved in patent litigations in which we challenge the validity or enforceability of innovator companies' listed patents and/or their applicability to our generic products. Therefore, settling patent litigations has been and is likely to continue to be part of our business. Parties to such settlement agreements in the U.S., including us, are required by law to file them with the U.S. Federal Trade Commission (the FTC) and the Antitrust Division of the Department of Justice (DOJ) for review. The FTC has publicly stated that, in its view, such settlement agreements may violate the antitrust laws. In some instances, the FTC has brought actions against brand and generic companies that have entered into such agreements. Accordingly, we may receive formal or informal requests from the FTC for information about a particular settlement agreement, and there is a risk that the FTC may commence an action against us alleging violation of the antitrust laws.

In addition, some members of Congress have proposed legislation that would limit the types of settlement agreements generic manufacturers can enter into with brand companies. In 2013, the Supreme Court, in *FTC v. Actavis*, determined that reverse payment patent settlements between generic and brand companies should be evaluated under the rule of reason, but provided limited guidance beyond the selection of this standard. Because the Supreme Court did not articulate the full range of criteria upon which a determination of legality of such settlements would be based or provide guidance on the precise circumstances under which such settlements would always qualify as legal, there may be extensive litigation over what constitutes a reasonable and lawful patent settlement between a brand and generic company. We are subject to multiple lawsuits purporting to be class actions brought by direct and indirect payers alleging that our settlement agreements respectively with Watson regarding the Lidoderm® patent litigation, and with Impax regarding the Opana® ER patent litigation, were unlawful in violation of federal antitrust laws, as well as various state laws.

We have significant goodwill and other intangible assets. Consequently, potential impairment of goodwill and other intangibles may significantly impact our profitability.

Goodwill and other intangibles represent a significant portion of our assets. As of December 31, 2016 and 2015, goodwill and other intangibles comprised approximately 74% and 78%, respectively, of our total assets. Goodwill and other intangible assets are subject to an impairment analysis whenever events or changes in circumstances indicate the carrying amount of the asset may not be recoverable. Additionally, goodwill and indefinite-lived assets are subject to an impairment test at least annually. For the years ended December 31, 2016 and 2015, we recorded asset impairment charges of $3,781.2 million and $1,140.7 million, respectively, which related primarily to goodwill and other intangible assets. The procedures and assumptions used in our goodwill and intangible assets impairment testing, and the results of our testing, are discussed in this report under the caption "Results of Operations."

Events giving rise to impairment of goodwill or intangible assets are an inherent risk in the pharmaceutical industry and often cannot be predicted. As a result of the significance of goodwill and other intangible assets, our results of operations and financial position in a future period could be negatively impacted should additional impairments of our goodwill or other intangible assets occur.

We are subject to various regulations pertaining to the marketing of our products and services.

We are subject to various federal and state laws pertaining to healthcare fraud and abuse involving the marketing and pricing of our products and services, including prohibitions on the offer of payment or acceptance of kickbacks or other remuneration for the purchase of our products and services, including inducements to potential patients to request our products and services and inducements to healthcare professionals to prescribe and use our products. Additionally, product promotion, educational activities, support of continuing medical education programs, and other interactions with healthcare professionals must be conducted in a manner consistent with the FDA regulations and the Anti-Kickback Statute. The Anti-Kickback Statute, with certain exceptions or exemptions published by the Office of the Inspector General of the Department of Health and Human Services (HHS-OIG), prohibits persons or entities from knowingly and willfully soliciting, receiving, offering or providing remuneration, directly or indirectly, to induce either the referral of an individual, or the furnishing, recommending, or arranging for a good or service, for which payment may be made under federal healthcare programs, such as the Medicare and Medicaid programs. Violations of the Anti-Kickback Statute also carry potential federal False Claims Act liability. Additionally, many states have adopted laws similar to the Anti-Kickback Statute, without identical exceptions or exemptions. Some of these state prohibitions apply to referral of patients for healthcare items or services reimbursed by any third-party payer, not only the Medicare and Medicaid programs. Any such new regulations or requirements may be difficult and expensive for us to comply with, may delay our introduction of new products, may adversely affect our total turnover and may have a material adverse effect on our business, results of operations, financial condition and cash flows.

Sanctions for violating these laws include criminal penalties and civil sanctions and possible exclusion from federal funded healthcare programs such as Medicare and Medicaid as well as potential liability under the False Claims Act and applicable state false claims acts. There can be no assurance that our practices will not be challenged under these laws in the future, that changes in these laws or interpretation of these laws would not give rise to new challenges of our practices, or that any such challenge would not have a material adverse effect on our business or results of operations. Law enforcement agencies sometimes initiate investigations into sales, marketing and/or pricing practices based on preliminary information or evidence, and such investigations can be and often are closed without any enforcement action. Nevertheless, these types of investigations and any related litigation can result in: (i) large expenditures of cash for legal fees, payment of penalties, and compliance activities; (ii) limitations on operations; (iii) diversion of management resources; (iv) injury to our reputation; and (v) decreased demand for our products.

In addition, the Group is subject to statutory and regulatory restrictions on the promotion of uses of prescription drugs or devices that are not cleared or approved by the FDA. Although the FDA does not regulate a physician's choice of medications, treatments or product uses, the FDCA and FDA regulations and guidance significantly restrict the ability of pharmaceutical and medical device companies to communicate with patients, physicians, and other third-parties about unapproved or uncleared product uses. FDA, FTC, the HHS-OIG, the DOJ and various state Attorneys General actively enforce state and federal prohibitions on the promotion of unapproved uses, as well as prohibitions against promotional practices deemed false or misleading. A company that is found to have improperly promoted its products under these laws may be subject to significant liability, including significant administrative, civil, and criminal sanctions, including but not limited to significant civil damages, criminal fines, and exclusion from participation in Medicare, Medicaid, and other federal healthcare programs. Applicable laws governing product promotion also provide for administrative, civil, and criminal liability for individuals, including, in some circumstances, potential strict vicarious liability. Conduct giving rise to such liability could also form the basis for private civil litigation by third-party payers or other persons allegedly harmed by such conduct.

We have established and implemented a corporate compliance program designed to prevent, detect, and correct violations of state and federal healthcare laws, including laws related to advertising and promotion of our drugs and devices. Nonetheless, the FDA, FTC, HHS-OIG, the DOJ and/or the state Attorneys General, and *qui tam* relators may take the position that we are not in compliance with such requirements, and, if such non-compliance is proven, the Group and, in some cases, individual employees, may be subject to significant liability, including the aforementioned administrative, civil, and criminal sanctions.

Furthermore, in February 2014, we entered into a Deferred Prosecution Agreement (DPA) with the U.S. Department of Justice and a Corporate Integrity Agreement (CIA) with the U.S. Department of Health and Human Services to resolve allegations regarding the promotion of Lidoderm®. In March 2013, our subsidiary, Par, entered into a CIA and a Plea Agreement with the U.S. Department of Justice to resolve allegations regarding the promotion of Megace ES®. Those agreements place certain obligations on us related to the marketing of our branded pharmaceutical products and our healthcare regulatory compliance program, including reporting requirements to the U.S. government, detailed requirements for our compliance program, code of conduct, and policies and procedures, and the requirement to engage an Independent Review Organization. We have implemented procedures and practices to comply with the CIA, including the engagement of an Independent Review Organization. In the event we breach the DPA, the Plea Agreement, and/or the CIA, there is a risk the government would seek remedies provided for in those agreements, including instituting criminal prosecution against us, seeking to impose stipulated penalties, or seeking to exclude us from participation in Federal health care programs.

The pharmaceutical industry is heavily regulated, which creates uncertainty about our ability to bring new products to market and imposes substantial compliance costs on our business.

Governmental authorities such as the FDA impose substantial requirements on the development, manufacture, holding, labeling, marketing, advertising, promotion, distribution and sale of therapeutic pharmaceutical products through lengthy and detailed laboratory and clinical testing and other costly and time-consuming procedures. In addition, before obtaining regulatory approvals for certain generic products, we must conduct limited bioequivalence studies and other research to show comparability to the branded products. A failure to obtain satisfactory results in required pre-marketing trials may prevent us from obtaining required regulatory approvals. The FDA may also require companies to conduct post-approval studies and post-approval surveillance regarding their drug products and to report adverse events.

Before obtaining regulatory approvals for the sale of any of our new product candidates, we must demonstrate through preclinical studies and clinical trials that the product is safe and effective for each intended use. Preclinical and clinical studies may fail to demonstrate the safety and effectiveness of a product. Likewise, we may not be able to demonstrate through clinical trials that a product candidate's therapeutic benefits outweigh its risks. Even promising results from preclinical and early clinical studies do not always accurately predict results in later, large scale trials. A failure to demonstrate safety and efficacy could or would result in our failure to obtain regulatory approvals. Clinical trials can be delayed for reasons outside of our control, which can lead to increased development costs and delays in regulatory approval. For example, there is substantial competition to enroll patients in clinical trials, and such competition has delayed clinical development of our products in the past. For example, patients may not enroll in clinical trials at the rate expected or patients may drop out after enrolling in the trials or during the trials. In addition, we rely on collaboration partners that may control or make changes in trial protocol and design enhancements, or encounter clinical trial compliance-related issues, which may also delay clinical trials. Product supplies may be delayed or be insufficient to treat the patients participating in the clinical trials, or manufacturers or suppliers may not meet the requirements of the FDA or foreign regulatory authorities, such as those relating to Current Good Manufacturing Practices. We also may experience delays in obtaining, or we may not obtain, required initial and continuing approval of our clinical trials from institutional review boards. We cannot confirm to you that we will not experience delays or undesired results in these or any other of our clinical trials.

We cannot confirm to you that the FDA or foreign regulatory agencies will approve, clear for marketing or certify any products developed by us or that such approval will not subject the marketing of our products to certain limits on indicated use. The FDA or foreign regulatory authorities may not agree with our assessment of the clinical data or they may interpret it differently. Such regulatory authorities may require additional or expanded clinical trials. Any limitation on use imposed by the FDA or delay in or failure to obtain FDA approvals or clearances of products developed by us would adversely affect the marketing of these products and our ability to generate product turnover, which would adversely affect our financial condition and results of operations.

In addition, with respect specifically to pharmaceutical products, the submission of a New Drug Application (NDA) or ANDA to the FDA with supporting clinical safety and efficacy data, for example, does not guarantee that the FDA will grant approval to market the product. Meeting the FDA's regulatory requirements to obtain approval to market a drug product, which varies substantially based on the type, complexity and novelty of the pharmaceutical product, typically takes years and is subject to uncertainty.

Additional delays may result if an FDA Advisory Committee or other regulatory authority recommends non-approval or restrictions on approval. Although the FDA is not required to follow the recommendations of its Advisory Committees, it usually does. A negative Advisory Committee meeting could signal a lower likelihood of approval, although the FDA may still end up approving our application. Regardless of an Advisory Committee meeting outcome or the FDA's final approval decision, public presentation of our data may shed positive or negative light on our application. In March 2017, we announced that the FDA's Drug Safety and Risk Management and Anesthetic and Analgesic Drug Products Advisory Committees (the Committees) voted that the benefits of reformulated OPANA® ER (oxymorphone hydrochloride extended release) no longer outweigh its risks. While several of the Committee members acknowledged the role of OPANA® ER in clinical practice, others believed its benefits are now outweighed by the continuing public health concerns around the product's misuse, abuse and diversion. During the Committees' discussion following the vote, a number of Committee members recommended that OPANA® ER remain on the market with additional regulatory restrictions to mitigate the risks. The FDA convened these Committees to discuss pre- and post-marketing data about the abuse of OPANA® ER, the product's overall risk-benefit profile, as well as the abuse of generic oxymorphone ER and oxymorphone immediate-release products. While the FDA will consider the Committees' vote, any decision regarding whether to take regulatory action rests solely with the FDA.

Some drugs are available in the United States that are not the subject of an FDA-approved NDA. In 2011, the FDA's Center for Drug Evaluation and Research ("CDER") Office of Compliance modified its enforcement policy with regard to the marketing of such "unapproved" marketed drugs. Under CDER's revised guidance, the FDA encourages manufacturers to obtain NDA approvals for such drugs by requiring unapproved versions to be removed from the market after an approved version has been introduced, subject to a grace period at the FDA's discretion. This grace period is intended to allow an orderly transition of supply to the market and to mitigate any potential related drug shortage. Depending on the length of the grace period and the time it takes for subsequent applications to be approved, this may result in a period of de facto market exclusivity to the first manufacturer that has obtained an approved NDA for the previously unapproved marketed drug. We may seek FDA approval for certain unapproved marketed drug products through the 505(b)(2) regulatory pathway. Even if we receive approval for an NDA under Section 505(b)(2), the FDA may not take timely enforcement action against companies marketing unapproved versions of the drug; therefore, we cannot be sure that that we will receive the benefit of any de facto exclusive marketing period or that we will fully recoup the expenses incurred to obtain an approval. In addition, certain competitors and others have objected to the FDA's interpretation of Section 505(b)(2). If the FDA's interpretation of Section 505(b)(2) is successfully challenged, this could delay or even prevent the FDA from approving any NDA that we submit under Section 505(b)(2).

Moreover, even if our product candidates are approved under Section 505(b)(2), the approval may be subject to limitations on the indicated uses for which the products may be marketed or to other conditions of approval, or may contain requirements for costly post-marketing testing and surveillance to monitor the safety or efficacy of the products.

The ANDA approval process for a new product varies in time, generally requiring a minimum of 10 months following submission of the ANDA to FDA, but could also take several years from the date of application. The timing for the ANDA approval process for generic products is difficult to estimate and can vary significantly. ANDA approvals, if granted, may not include all uses (known as indications) for which a company may seek to market a product.

Further, once a product is approved or cleared for marketing, failure to comply with applicable regulatory requirements can result in, among other things, suspensions or withdrawals of approvals or clearances, seizures or recalls of products, injunctions against the manufacture, holding, distribution, marketing and sale of a product, and civil and criminal sanctions. Furthermore, changes in existing regulations or the adoption of new regulations could prevent us from obtaining, or affect the timing of, future regulatory approvals or clearances. Meeting regulatory requirements and evolving government standards may delay marketing of our new products for a considerable period of time, impose costly procedures upon our activities and result in a competitive advantage to larger companies that compete against us.

Based on scientific developments, post-market experience, or other legislative or regulatory changes, the current FDA standards of review for approving new pharmaceutical products, or new indications or uses for approved or cleared products, are sometimes more stringent than those that were applied in the past.

Some new or evolving FDA review standards or conditions for approval or clearance were not applied to many established products currently on the market, including certain opioid products. As a result, the FDA does not have as extensive safety databases on these products as on some products developed more recently. Accordingly, we believe the FDA has expressed an intention to develop such databases for certain of these products, including many opioids. In particular, the FDA has expressed interest in specific chemical structures that may be present as impurities in a number of opioid narcotic active pharmaceutical ingredients, such as oxycodone, which based on certain structural characteristics and laboratory tests may indicate the potential for having mutagenic effects. FDA has required, and may continue to require, more stringent controls of the levels of these impurities in drug products for approval.

Also, the FDA may require labeling revisions, formulation or manufacturing changes and/or product modifications for new or existing products containing such impurities. The FDA's more stringent requirements, together with any additional testing or remedial measures that may be necessary, could result in increased costs for, or delays in, obtaining approval for certain of our products in development. Although we do not believe that the FDA would seek to remove a currently marketed product from the market unless such mutagenic effects are believed to indicate a significant risk to patient health, we cannot make any such assurance.

In May of 2016, an FDA advisory panel recommended mandatory training of all physicians who prescribe opioids on the risks of prescription opioids. In 2016, the CDC also issued a guideline for prescribing opioids for chronic pain that provides recommendations for primary care clinicians who are prescribing opioids for chronic pain outside of active cancer treatment, palliative care, and end-of-life care. In addition, state health departments and boards of pharmacy have authority to regulate distribution and may modify their regulations with respect to prescription narcotics in an attempt to curb abuse. In either case, any such new regulations or requirements may be difficult and expensive for us to comply with, may delay our introduction of new products, may adversely affect our total turnover and may have a material adverse effect on our business, results of operations, financial condition and cash flows.

The FDA has the authority to require companies to undertake additional post-approval studies to assess known or signaled safety risks and to make any labeling changes to address those risks. The FDA also can require companies to formulate approved Risk Evaluation and Mitigation Strategies (REMS) to confirm a drug's benefits outweigh its risks. For example, in 2011, we, along with other manufacturers of long-acting and extended-release opioid drug products, received a letter from the FDA requiring that we develop and submit to the FDA a post-market REMS plan for our OPANA® ER, morphine sulfate ER, and oxycodone ER drug products to require that training is provided to prescribers of these products, and that information is provided to prescribers that they can use in counseling patients about the risks and benefits of opioid drug use. In December 2011, the FDA approved our interim REMS for OPANA® ER, which was subsequently superseded by the class-wide extended-release/long-acting REMS approved in July 2012. The goal of this REMS is to reduce serious adverse outcomes resulting from inappropriate prescribing, misuse and abuse of extended-release or long-acting opioid analgesics while maintaining patient access to pain medications. The REMS includes a Medication Guide, Elements to Assure Safe Use and annual REMS Assessment Reports.

The FDA's exercise of its authority under the FFDCA could result in delays or increased costs during product development, clinical trials and regulatory review, increased costs to comply with additional post-approval regulatory requirements and potential restrictions on sales of approved products. Foreign regulatory agencies often have similar authority and may impose comparable requirements and costs. Post-marketing studies and other emerging data about marketed products, such as adverse event reports, may also adversely affect sales of our products. Furthermore, the discovery of significant safety or efficacy concerns or problems with a product in the same therapeutic class as one of our products that implicate or appear to implicate the entire class of products could have an adverse effect on sales of our product or, in some cases, result in product withdrawals. The FDA has continuing authority over the approval of an NDA or ANDA and may withdraw approval if, among other reasons, post-marketing clinical or other experience, tests or data show that a drug is unsafe for use under the conditions upon which it was approved, or if FDA determines that there is a lack of substantial evidence of the drug's efficacy under the conditions described in its labeling. Furthermore, new data and information, including information about product misuse or abuse at the user level, may lead government agencies, professional societies, practice management groups or patient or trade organizations to recommend or publish guidance or guidelines related to the use of our products, which may lead to reduced sales of our products.

The FDA and the DEA have important and complementary responsibilities with respect to our business. The FDA administers an application and post-approval monitoring process to confirm that products that are available in the market are safe, effective and consistently of uniform, high quality. The DEA administers registration, drug allotment and accountability systems to satisfy against loss and diversion of controlled substances. Both agencies have trained investigators that routinely, or for cause, conduct inspections, and both have authority to seek to enforce their statutory authority and regulations through administrative remedies as well as civil and criminal enforcement actions.

The FDA regulates and monitors the quality of drug clinical trials to provide human subject protection and to support marketing applications. The FDA may place a hold on a clinical trial and may cause a suspension or withdrawal of product approvals if regulatory standards are not maintained. The FDA also regulates the facilities, processes, and procedures used to manufacture and market pharmaceutical products in the U.S. Manufacturing facilities must be registered with the FDA and all products made in such facilities must be manufactured in accordance with the latest cGMP regulations, which are enforced by the FDA. Compliance with clinical trial requirements and cGMP regulations requires the dedication of substantial resources and requires significant expenditures. In the event an approved manufacturing facility for a particular drug is required by the FDA to curtail or cease operations, or otherwise becomes inoperable, or a third party contract manufacturing facility faces manufacturing problems, obtaining the required FDA authorization to manufacture at the same or a different manufacturing site could result in production delays, which could adversely affect our business, results of operations, financial condition and cash flow.

The FDA is authorized to perform inspections of U.S. and foreign facilities under the FFDCA. At the end of such an inspection, FDA could issue a Form 483 Notice of Inspectional Observations, which could cause us to modify certain activities identified during the inspection. Following such inspections, the FDA may issue an untitled letter as an initial correspondence that cites violations that do not meet the threshold of regulatory significance of a Warning Letter. FDA guidelines also provide for the issuance of Warning Letters for violations of "regulatory significance" for which the failure to adequately and promptly achieve correction may be expected to result in an enforcement action. FDA also may issue Warning Letters and untitled letters in connection with events or circumstances unrelated to an FDA inspection.

Similar to other healthcare companies, during 2016, our facilities, in multiple countries, across the full range of our business units, were subject to routine and new-product related inspections by the FDA, MHRA, HPRA and Health Canada. Some of these inspections resulted in non-critical inspection observations (including FDA Form 483 observations). We have responded to all inspection observations within the required time frame and have implemented, or are continuing to implement, the corrective action plans as agreed with the relevant regulatory agencies.

Many of our core products contain controlled substances. The stringent DEA regulations on our use of controlled substances include restrictions on their use in research, manufacture, distribution and storage. A breach of these regulations could result in imposition of civil penalties, refusal to renew or action to revoke necessary registrations, or other restrictions on operations involving controlled substances. In addition, failure to comply with applicable legal requirements subjects the manufacturing facilities of our subsidiaries and manufacturing partners to possible legal or regulatory action, including shutdown. Any such shutdown may adversely affect their ability to supply us with product and thus, our ability to market affected products. This could have a negative impact on our business, results of operations, financial condition, cash flows and competitive position. See also the risk described under the caption "The DEA limits the availability of the active ingredients used in many of our current products and products in development, as well as the production of these products, and, as a result, our procurement and production quotas may not be sufficient to meet commercial demand or complete clinical trials." In addition, we are subject to the Federal Drug Supply Chain Security Act (DSCSA). The U.S. government has enacted DSCSA which requires development of an electronic pedigree to track and trace each prescription drug at the salable unit level through the distribution system, which will be effective incrementally over a 10-year period. Compliance with DSCSA and future U.S. federal or state electronic pedigree requirements may increase our operational expenses and impose significant administrative burdens.

We cannot determine what effect changes in regulations or legal interpretations or requirements by the FDA or the courts, when and if promulgated or issued, may have on our business in the future. Changes could, among other things, require different labeling, monitoring of patients, interaction with physicians, education programs for patients or physicians, curtailment of necessary supplies, or limitations on product distribution. These changes, or others required by the FDA or DEA could have an adverse effect on the sales of these products. The evolving and complex nature of regulatory science and regulatory requirements, the broad authority and discretion of the FDA and the generally high level of regulatory oversight results in a continuing possibility that, from time to time, we will be adversely affected by regulatory actions despite our ongoing efforts and commitment to achieve and maintain full compliance with all regulatory requirements.

The success of our acquisition and licensing strategy is subject to uncertainty and any completed acquisitions or licenses may reduce our earnings, be difficult to integrate, not perform as expected or require us to obtain additional financing.

We regularly evaluate selective acquisitions and look to continue to enhance our product line by acquiring rights to additional products and compounds. Such acquisitions may be carried out through corporate acquisitions, asset acquisitions, licensing and joint venture arrangements or by acquiring other companies. However, we cannot confirm to you that we will be able to complete acquisitions that meet our target criteria on satisfactory terms, if at all. In particular, we may not be able to identify suitable acquisition candidates. In addition, any acquisition of assets and rights to products and compounds may fail to accomplish our strategic objective and may not perform as expected. Further, if we are unable to maintain, on commercially reasonable terms, product, compound or other licenses that we have acquired, our ability to develop or commercially exploit our products may be inhibited. In order to continue to develop and broaden our product range we must compete to acquire these assets. Our competitors may have greater resources than us and therefore be better able to complete acquisitions or may cause the ultimate price we pay for acquisitions to increase. If we fail to achieve our acquisition goals, our growth may be limited.

In addition to the risks related to acquisition of assets and products, acquisitions of companies may expose us to additional risks, which are beyond our control, and may have a material adverse effect on our profitability and cash flows. The combination of two independent businesses is a complex, costly and time-consuming process. As a result, we may be required to devote significant management attention and resources to the integration of an acquired business into our practices and operations. Any integration process may be disruptive and, if implemented ineffectively, may restrict the realization of the full expected benefits.

In addition, any acquisitions we make may result in material unanticipated problems, expenses, liabilities, competitive responses and loss of customer relationships. The difficulties of combining operations of companies include, among others:

- diversion of management's attention to integration matters;
- difficulties in achieving anticipated cost savings, synergies, business opportunities and growth prospects from the combination of the businesses;
- difficulties in the integration of operations and systems;
- difficulties in conforming standards, controls, procedures and accounting and other policies, business cultures and compensation structures between the companies;
- difficulties in the assimilation of employees;
- difficulties in managing the expanded operations of a significantly larger and more complex company;
- challenges in retaining existing customers and obtaining new customers;
- potential unknown liabilities or larger liabilities than projected, adverse consequences and unforeseen increased expenses associated with the merger; and
- difficulties in coordinating a geographically dispersed organization.

The benefits of a merger are also subject to a variety of other factors, many of which are beyond our ability to control, such as changes in the rate of economic growth in jurisdictions in which the combined company will do business, the financial performance of the combined business in various jurisdictions, currency exchange rate fluctuations, and significant changes in trade, monetary or fiscal policies, including changes in interest rates, and tax law of the jurisdictions in which the combined company will do business. The impact of these factors, individually and in the aggregate, is difficult to predict, in part because the occurrence of the events or circumstances described in such factors may be interrelated, and the impact to the combined company of the occurrence of any one of these events or circumstances could be compounded or, alternatively, reduced, offset, or more than offset, by the occurrence of one or more of the other events or circumstances described in such factors.

In addition, based on current acquisition prices in the pharmaceutical industry, acquisitions could decrease our net profit per share and add significant intangible assets and related amortization or impairment charges. Our acquisition strategy may require us to obtain additional debt or equity financing, resulting in leverage, increased debt obligations as compared to equity, or dilution of ownership. We may not be able to finance acquisitions on terms satisfactory to us.

We may decide to sell assets, which could adversely affect our prospects and opportunities for growth.

We may from time to time consider selling certain assets if (i) we determine that such assets are not critical to our strategy or (ii) we believe the opportunity to monetize the asset is attractive or for various other reasons, including for the reduction of indebtedness. We have explored and will continue to explore the sale of certain non-core assets. Although our expectation is to engage in asset sales only if they advance or otherwise support our overall strategy, any such sale could reduce the size or scope of our business, our market share in particular markets or our opportunities with respect to certain markets, products or therapeutic categories. As a result, any such sale could have an adverse effect on our business, prospects and opportunities for growth, results of operations, financial condition and cash flows.

Our growth and development will depend on developing, commercializing and marketing new products, including both our own products and those developed with our collaboration partners. If we do not do so successfully, our growth and development will be impaired.

Our future turnover and profitability will depend, to a significant extent, upon our ability to successfully commercialize new branded and generic pharmaceutical products protected by patent or statutory authority in a timely manner. As a result, we must continually develop, test and manufacture new products, which must meet regulatory standards to receive requisite marketing authorizations. Products we are currently developing may or may not receive the regulatory approvals or clearances necessary for us to market them. Furthermore, the development and commercialization process is time-consuming and costly, and we cannot confirm to you that any of our products, if and when developed and approved, can be successfully commercialized.

In addition, risks associated with developing, commercializing and marketing new products are beyond our control. For example, some of our collaboration partners may decide to make substantial changes to a product's formulation or design, may experience financial difficulties or may have limited financial resources. Any of the foregoing may delay the development, commercialization and/or marketing of new products. In addition, if a co-developer on a new product terminates our collaboration agreement or does not perform under the agreement, we may experience delays and additional costs in developing and marketing that product.

We conduct research and development of medical and technological products to enable us to manufacture and market pharmaceutical products in accordance with specific government regulations. Much of our drug development effort is focused on technically difficult-to-formulate products and/or products that require advanced manufacturing technology. Typically, expenses related to research, development and regulatory approval of compounds for our branded pharmaceutical products are significantly greater than those expenses associated with generic products. As we continue to develop new products, our research expenses will likely increase. Because of the inherent risk associated with research and development efforts in the healthcare industry, particularly with respect to new drugs, our research and development expenditures may not result in the successful regulatory approval and introduction of new pharmaceutical products. Also, after we submit a regulatory application, the relevant governmental health authority may require that we conduct additional studies, including, studies to assess the product's interaction with alcohol. As a result, we may be unable to reasonably predict the total research and development costs to develop a particular product.

The availability of third party reimbursement for our products is uncertain, and thus we may find it difficult to maintain current price levels. Additionally, the market may not accept those products for which third party reimbursement is not adequately provided.

Our ability to commercialize our products depends, in part, on the extent to which reimbursement for the costs of these products is available from government healthcare programs, such as Medicaid and Medicare, private health insurers and others. We cannot be certain that, over time, third party reimbursements for our products will be adequate for us to maintain price levels sufficient for realization of an appropriate return on our investment. Government payers, private insurers and other third party payers are increasingly attempting to contain healthcare costs by (1) limiting both coverage and the level of reimbursement (including adjusting co-pays) for products approved for marketing by the FDA, (2) refusing, in some cases, to provide any coverage for uses of approved products for indications for which the FDA has not granted marketing approval and (3) requiring or encouraging, through more favorable reimbursement levels or otherwise, the substitution of generic alternatives to branded products.

We may experience pricing pressure on the price of our products due to social or political pressure to lower the cost of drugs, which would reduce our turnover and future profitability.

We may experience downward pricing pressure on the price of our products due to social or political pressure to lower the cost of drugs, which would reduce our turnover and future profitability. Recent events have resulted in increased public and governmental scrutiny of the cost of drugs, especially in connection with price increases following companies' acquisition of the rights to certain drug products. In particular, U.S. federal prosecutors have issued subpoenas to pharmaceutical companies seeking information about drug pricing practices. In addition, the U.S. Senate is publicly investigating a number of pharmaceutical companies relating to drug-price increases and pricing practices. Our turnover and future profitability could be negatively affected if these inquiries were to result in legislative or regulatory proposals that limit our ability to increase the prices of our products.

In addition, in September 2016, a group of U.S. Senators introduced legislation that would require pharmaceutical manufacturers to justify price increases of more than 10% in a 12-month period, and a large number of individual States have introduced legislation aimed at drug pricing regulation, transparency or both. Our turnover and future profitability could be negatively affected by the passage of these laws or similar federal or state legislation. Pressure from social activist groups and future government regulations may also put downward pressure on the price of drugs, which could result in downward pressure on the prices of our products in the future.

Our business is highly dependent upon market perceptions of us, our brands, and the safety and quality of our products, and may be adversely impacted by negative publicity or findings.

Market perceptions of us are very important to our business, especially market perceptions of our group and brands and the safety and quality of our products. If we, our partners and suppliers, or our brands suffer from negative publicity, or if any of our products or similar products which other companies distribute are subject to market withdrawal or recall or are proven to be, or are claimed to be, ineffective or harmful to consumers, then this could have a material adverse effect on our business, results of operations, financial condition and cash flows.

For example, the pharmaceutical drug supply has been increasingly challenged by the vulnerability of distribution channels to illegal counterfeiting and the presence of counterfeit products in a growing number of markets and over the Internet. Third parties may illegally distribute and sell counterfeit versions of our products that do not meet the rigorous manufacturing and testing standards that our products undergo. Counterfeit products are frequently unsafe or ineffective, and can be potentially life-threatening. Counterfeit medicines may contain harmful substances, the wrong dose of API or no API at all. However, to distributors and users, counterfeit products may be visually indistinguishable from the authentic version.

In addition, negative posts or comments about us on any social networking web site could seriously damage our reputation. The inappropriate use of certain social media vehicles could cause brand damage or information leakage or could lead to legal implications from the improper collection and/or dissemination of personally identifiable information or the improper dissemination of material non-public information.

We are dependent on market perceptions, and negative publicity associated with product quality, patient illness, or other adverse effects resulting from, or perceived to be resulting from, our products, or our partners' and suppliers' manufacturing facilities, could have a material adverse effect on our business, results of operations, financial condition and cash flows.

Our reporting and payment obligations under the Medicaid Drug Rebate Program and other governmental drug pricing programs are complex and may involve subjective decisions. Any failure to comply with those obligations could subject us to penalties and sanctions.

We are subject to federal and state laws prohibiting the presentation (or the causing to be presented) of claims for payment (by Medicare, Medicaid, or other third-party payers) that are determined to be false or fraudulent, including presenting a claim for an item or service that was not provided. These false claims statutes include the federal civil False Claims Act, which permits private persons to bring suit in the name of the government alleging false or fraudulent claims presented to or paid by the government (or other violations of the statutes) and to share in any amounts paid by the entity to the government in fines or settlement. Such suits, known as *qui tam* actions, have increased significantly in the healthcare industry in recent years. These actions against pharmaceutical companies, which do not require proof of a specific intent to defraud the government, may result in payment of fines to and/or administrative exclusion from the Medicare, Medicaid, and/or other government healthcare programs.

We are subject to laws that require us to enter into a Medicaid Drug Rebate Agreement and a 340B Pharmaceutical Pricing Agreement as a condition for having our products eligible for payment under Medicare Part B and Medicaid. We have entered into such agreements. In addition, we are required to report certain pricing information to the Centers for Medicare and Medicaid Services (CMS) on a periodic basis to allow for accurate determination of rebates owed under the Medicaid Drug Rebate Agreement, of ceiling prices under the 340B program and certain other government pricing arrangements, and of reimbursement rates for certain drugs paid under Medicare Part B. On February 1, 2016, CMS issued a Final Rule implementing the Medicaid Drug Rebate provisions incorporated into the PPACA, effective April 1, 2016 in most instances. Implementation of the Final Rule required operational adjustments by us in order to maintain compliance with applicable law. Changes included in the Final Rule revised how manufacturers calculate Average Manufacturer Price (AMP) and Best Price and also affect the quarterly amounts that we owe to state Medicaid programs through the Medicaid Drug Rebate program. Also, CMS made changes with respect to how certain products are categorized for purposes of the Medicaid Drug Rebate program (i.e., single source, innovator multiple source, or non-innovator multiple source), which could affect the rebate calculation methodology, and thus the level of rebates incurred for affected products. In addition, CMS finalized its proposal to change the reimbursement metrics upon which Medicaid agencies are required to reimburse for covered outpatient drugs. The new reimbursement structure could adversely affect providers' reimbursement for our products, and thus could adversely affect sales of our products. The Final Rule also expanded the scope of the Medicaid Drug Rebate program to apply to U.S. Territories, effective April 1, 2020, which will require operational adjustments and may result in additional rebate liability. Finally, CMS withdrew its proposed definition of "line extension" set forth in the 2012 proposed rule regarding the Medicaid Drug Rebate program and opened a new 60-day comment period soliciting views on how to interpret the relevant PPACA provisions. Additional operational adjustments and financial implications may result upon CMS' finalization of "line extension" provisions.

We and other pharmaceutical companies have been defendants in a number of lawsuits filed by various government entities, alleging generally that we and numerous other pharmaceutical companies reported false pricing information in connection with certain drugs that are reimbursable by state Medicaid programs, which are partially funded by the federal government. There is a risk the Group will be subject to similar investigations or litigations in the future and that the Group will suffer adverse decisions or verdicts of substantial amounts or that the Group will enter into monetary settlements. Any unfavorable outcomes as a result of such future litigation could have a material adverse effect on our business, financial condition, results of operations and cash flows.

There is additional uncertainty surrounding the healthcare insurance coverage mandate that went into effect in the U.S. in 2015 and continued into 2016. Employers may seek to reduce costs by reducing or eliminating employer group healthcare plans or transferring a greater portion of healthcare costs to their employees. Job losses or other economic hardships may also result in reduced levels of coverage for some individuals, potentially resulting in lower levels of healthcare coverage for themselves or their families. These economic conditions may affect patients' ability to afford healthcare as a result of increased co-pay or deductible obligations, greater cost sensitivity to existing co-pay or deductible obligations, lost healthcare insurance coverage or for other reasons. We believe such conditions could lead to changes in patient behavior and spending patterns that negatively affect usage of certain of our products, including some patients delaying treatment, rationing prescription medications, leaving prescriptions unfilled, reducing the frequency of visits to healthcare facilities, utilizing alternative therapies, or foregoing healthcare insurance coverage. Such changes may result in reduced demand for our products, which could materially and adversely affect the sales of our products, our business and results of operations.

Our customer concentration may adversely affect our financial condition and results of operations.

We primarily sell our products to a limited number of wholesale drug distributors and large pharmacy chains. In turn, these wholesale drug distributors and large pharmacy chains supply products to pharmacies, hospitals, governmental agencies and physicians. In addition, this distribution network is continuing to undergo significant consolidation marked by mergers and acquisitions among wholesale drug distributors and large pharmacy chains. We expect that consolidation of wholesale drug distributors and large pharmacy chains will increase pricing and other competitive pressures on pharmaceutical companies, including us. Total turnover from customers who accounted for 10% or more of our total turnover during the years ended December 31 are as follows:

	2016	2015
Cardinal Health, Inc.	26%	21%
McKesson Corporation	27%	31%
AmerisourceBergen Corporation	25%	23%

Turnover from these customers are included within our U.S. Branded Pharmaceuticals, U.S. Generic Pharmaceuticals and International Pharmaceuticals segments. If we were to lose the business of any of these customers, or if any were to experience difficulty in paying us on a timely basis, our total turnover, profitability and cash flows could be materially and adversely affected.

We are currently dependent on outside manufacturers for the manufacture of a significant amount of our products; therefore, we have and will continue to have limited control of the manufacturing process and related costs. Certain of our manufacturers currently constitute the sole source of one or more of our products.

Third party manufacturers currently manufacture a significant amount of our products pursuant to contractual arrangements. Certain of our manufacturers currently constitute the sole source of our products. For example, Teikoku is our sole source of Lidoderm® and Grünenthal GmbH (Grünenthal) is our sole source for one of our formulations of OPANA® ER. Because of contractual restraints and the lead-time necessary to obtain FDA approval, and possibly DEA registration, of a new manufacturer, replacement of any of these manufacturers may be expensive and time consuming and may cause interruptions in our supply of products to customers. As a result, any such delay could have a material adverse effect on our business, financial condition, results of operations and cash flows.

Because many of our products are manufactured by third parties, we have a limited ability to control the manufacturing process or costs related to the process. Increases in the prices we pay our manufacturers, interruptions in our supply of products or lapses in quality could adversely impact our margins, profitability and cash flows. We are reliant on our third party manufacturers to maintain the facilities at which they manufacture our products in compliance with FDA, DEA, state and local regulations. If they fail to maintain compliance with FDA, DEA or other critical regulations, they could be ordered to cease manufacturing, or product may be recalled, which would have a material adverse impact on our business, results of operations, financial condition and cash flows. Additionally, if any facility that manufactures our products experiences a natural disaster, we could experience a material adverse impact on our business, results of operations, financial condition and cash flows. In addition to FDA and DEA regulation, violation of standards enforced by the Environmental Protection Agency (EPA) and the Occupational Safety and Health Administration (OSHA) and their counterpart agencies at the state level could slow down or curtail operations of third party manufacturers.

In addition, we may consider entering into additional manufacturing arrangements with third party manufacturers. In each case, we will incur significant costs in obtaining the regulatory approvals and taking other necessary steps to begin commercial production by these manufacturers. If the market for the products manufactured by these third parties substantially contracts or disappears, we will continue to be financially obligated under these contracts. Such an obligation could have a material adverse effect on our business.

We are dependent on third parties to supply all raw materials used in our products and to provide services for certain core aspects of our business. Any interruption or failure by these suppliers, distributors and collaboration partners to meet their obligations pursuant to various agreements with us could have a material adverse effect on our business, results of operations, financial condition and cash flows.

We rely on third parties to supply all raw materials used in our products. In addition, we rely on third party suppliers, distributors and collaboration partners to provide services for certain core aspects of our business, including manufacturing, warehousing, distribution, customer service support, medical affairs services, clinical studies, sales and other technical and financial services. All third party suppliers and contractors are subject to FDA, and very often DEA, requirements. Our business and financial viability are dependent on the continued supply of goods and services by these third party suppliers, the regulatory compliance of these third parties, and on the strength, validity and terms of our various contracts with these third party manufacturers, distributors and collaboration partners. Any interruption or failure by our suppliers, distributors and collaboration partners to meet their obligations pursuant to various agreements with us could have a material adverse effect on our business, financial condition, results of operations and cash flows. In addition, we have entered into minimum purchase requirement contracts with some of our third party raw material suppliers. If the market for the products that utilize these raw materials substantially contracts or disappears, we will continue to be financially obligated under these contracts and meeting such obligations could have a material adverse effect on our business.

We are dependent upon third parties to provide us with various estimates as a basis for our financial reporting. While we undertake certain procedures to review the reasonableness of this information, we cannot obtain absolute assurance over the accounting methods and controls over the information provided to us by third parties. As a result, we are at risk of them providing us with erroneous data which could have a material adverse impact on our business and or reporting.

If our manufacturing facilities are unable to manufacture our products or the manufacturing process is interrupted due to failure to comply with regulations or for other reasons, it could have a material adverse impact on our business.

If any of our manufacturing facilities fail to comply with regulatory requirements or encounter other manufacturing difficulties, it could adversely affect our ability to supply products. All facilities and manufacturing processes used for the manufacture of pharmaceutical products are subject to inspection by regulatory agencies at any time and must be operated in conformity with cGMP and, in the case of controlled substances, DEA regulations. Compliance with the FDA's cGMP and DEA requirements applies to both drug products seeking regulatory approval and to approved drug products. In complying with cGMP requirements, pharmaceutical manufacturing facilities must continually expend significant time, money and effort in production, record-keeping and quality assurance and control so that their products meet applicable specifications and other requirements for product safety, efficacy and quality. Failure to comply with applicable legal requirements subjects our manufacturing facilities to possible legal or regulatory action, including shutdown, which may adversely affect our ability to supply the product. Were we not able to manufacture products at our manufacturing facilities because of regulatory, business or any other reasons, the manufacture and marketing of these products would be interrupted. This could have a material adverse impact on our business, results of operation, financial condition, cash flows and competitive position.

For example, our Horsham facility and the facilities of the manufacturer that we are in the process of qualifying as an alternate manufacturer for XIAFLEX® (such manufacturer, the "Proposed Alternate Manufacturer" and such facility, the "Proposed Alternate Facility") are subject to such regulatory requirements and oversight. If we or the Proposed Alternate Manufacturer fail to comply with cGMP requirements, we may not be permitted to sell our products or may be limited in the jurisdictions in which we are permitted to sell them. Further, if an inspection by regulatory authorities indicates that there are deficiencies, including non-compliance with regulatory requirements, we could be required to take remedial actions, stop production or close our Horsham facility or the Proposed Alternate Facility, which would disrupt the manufacturing processes, limit the supplies of XIAFLEX® and delay clinical trials and subsequent licensure, and/or limit the sale of commercial supplies. In addition, future noncompliance with any applicable regulatory requirements may result in refusal by regulatory authorities to allow use of XIAFLEX® in clinical trials, refusal of the government to allow distribution of XIAFLEX® within the U.S. or other jurisdictions, criminal prosecution and fines, recall or seizure of products, total or partial suspension of production, prohibitions or limitations on the commercial sale of products, refusal to allow the entering into of federal and state supply contracts, and follow-on civil litigation.

The DEA limits the availability of the active ingredients used in many of our current products and products in development, as well as the production of these products, and, as a result, our procurement and production quotas may not be sufficient to meet commercial demand or complete clinical trials.

The DEA regulates chemical compounds as Schedule I, II, III, IV or V substances, with Schedule I substances considered to present the highest risk of substance abuse and Schedule V substances the lowest risk. The active ingredients in some of our current products and products in development, including oxycodone, oxymorphone, buprenorphine, morphine, fentanyl, and hydrocodone, are listed by the DEA as Schedule II or III substances under the Controlled Substances Act of 1970. Consequently, their manufacture, shipment, storage, sale and use are subject to a high degree of regulation. For example, generally, all Schedule II drug prescriptions must be signed by a physician, physically presented to a pharmacist and may not be refilled without a new prescription.

Furthermore, the DEA limits the availability of the active ingredients used in many of our current products and products in development and sets a quota on the production of these products. We, or our contract manufacturing organizations, must annually apply to the DEA for procurement and production quotas in order to obtain these substances and produce our products. As a result, our procurement and production quotas may not be sufficient to meet commercial demand or to complete clinical trials. Moreover, the DEA may adjust these quotas from time to time during the year. Any delay or refusal by the DEA in establishing our quotas, or modification of our quotas, for controlled substances could delay or result in the stoppage of our clinical trials or product launches, or could cause trade stock disruptions for those products that have already been launched, which could have a material adverse effect on our business, financial position, results of operations and cash flows.

If we are unable to retain our key personnel, and continue to attract additional professional staff, we may be unable to maintain or expand our business.

Because of the specialized scientific nature of our business, our ability to develop products and to compete with our current and future competitors will remain highly dependent, in large part, upon our ability to attract and retain qualified scientific, technical and commercial personnel. The loss of key scientific, technical and commercial personnel or the failure to recruit additional key scientific, technical and commercial personnel could have a material adverse effect on our business. While we have consulting agreements with certain key individuals and institutions and have employment agreements with our key executives, we cannot confirm to you that we will succeed in retaining personnel or their services under existing agreements. There is intense competition for qualified personnel in the areas of our activities, and we cannot confirm to you that we will be able to continue to attract and retain the qualified personnel necessary for the development of our business.

The trading prices of our securities may be volatile, and your investment in our securities could decline in value.

The market prices for securities of pharmaceutical companies in general have been highly volatile and may continue to be highly volatile in the future. For example, in 2016, our ordinary shares traded between $12.56 and $61.14 per share on the NASDAQ. The following factors, in addition to other principal risks described in this section, may cause the market value of our securities to fluctuate:

- FDA approval or disapproval of any of the drug applications we have submitted;
- the success or failure of our clinical trials;
- new data or new analyses of older data that raises potential safety or effectiveness issues concerning our approved products;
- product recalls;
- competitors announcing technological innovations or new commercial products;
- introduction of generic substitutes for our products, including the filing of ANDAs with respect to generic versions of our branded products;
- developments concerning our or others' proprietary rights, including patents;

- competitors' publicity regarding actual or potential products under development or other activities affecting our competitors or the industry in general;
- regulatory developments in the U.S. and foreign countries, or announcements relating to these matters;
- period-to-period fluctuations in our financial results;
- new legislation in the U.S. relating to the development, sale or pricing of pharmaceutical products or changes in interpretation of existing legislation relating thereto;
- a determination by a regulatory agency that we are engaging or have engaged in inappropriate sales or marketing activities, including promoting the "off-label" use of our products;
- social and political pressure to lower the cost of drugs;
- social and political scrutiny over increases in prices of shares of pharmaceutical companies that are perceived to be caused by a strategy of growth through acquisitions;
- litigation; and
- changes in the political and regulatory environment and international relations as a result of events such as the exit of the United Kingdom from the European Union (Brexit) and the new U.S. administration and other external factors, including market speculation or disasters and other crises.

Our operations could be disrupted if our information systems fail, if we are unsuccessful in implementing necessary upgrades or if we are subject to cyber-attacks.

Our business depends on the efficient and uninterrupted operation of our computer and communications systems and networks, hardware and software systems and our other information technology. We collect and maintain information, which includes confidential and proprietary information as well as personal information regarding our customers and employees, in digital form. Data maintained in digital form is subject to risk of cyber-attacks, which are increasing in frequency and sophistication. Cyber-attacks could include the deployment of harmful malware, viruses, worms and other means to affect service reliability and threaten data confidentiality, integrity and availability. Despite our efforts to monitor and safeguard our systems to prevent data compromise, the possibility of a future data compromise cannot be eliminated entirely, and risks associated with intrusion, tampering, and theft remain. In addition, we do not have insurance coverage with respect to system failures or cyber-attacks. If our systems were to fail or we are unable to successfully expand the capacity of these systems, or we are unable to integrate new technologies into our existing systems, our operations and financial results could suffer.

We also have outsourced significant elements of our operations to third parties, some of which are outside the U.S., including significant elements of our information technology infrastructure, and as a result we are managing many independent vendor relationships with third parties who may or could have access to our confidential information. The size and complexity of our information technology systems, and those of our third party vendors with whom we contract, make such systems potentially vulnerable to service interruptions. The size and complexity of our and our vendors' systems and the large amounts of confidential information that is present on them also makes them potentially vulnerable to security breaches from inadvertent or intentional actions by our employees, partners or vendors, or from attacks by malicious third parties.

The Group and its vendors' sophisticated information technology operations are spread across multiple, sometimes inconsistent platforms, which pose difficulties in maintaining data integrity across systems. The ever-increasing use and evolution of technology, including cloud-based computing, creates opportunities for the unintentional or improper dissemination or destruction of confidential information stored in the Group's systems.

Foreign regulatory requirements vary, including with respect to the regulatory approval process, and failure to obtain regulatory approval or maintain compliance with requirements in foreign jurisdictions would prevent or impact the marketing of our products in those jurisdictions.

We have worldwide intellectual property rights to market many of our products and product candidates and intend to seek approval to market certain of our products outside of the U.S. Approval of a product by the regulatory authorities of foreign countries must be obtained prior to manufacturing or marketing that product in those countries. The approval procedure varies among countries and can involve additional testing and the time required to obtain such approval may differ from that required to obtain FDA approval. The non-U.S. regulatory approval process includes all of the risks associated with obtaining FDA approval set forth herein. Approval by the FDA does not secure approval by the regulatory authorities of any other country, nor does the approval by foreign regulatory authorities in one country secure approval by regulatory authorities in other foreign countries or the FDA.

Outside of the U.S., regulatory agencies generally evaluate and monitor the safety, efficacy and quality of pharmaceutical products and devices and impose regulatory requirements applicable to manufacturing processes, stability testing, record keeping and quality standards, among others. These requirements vary across jurisdiction. In certain countries, including emerging and developing markets, the applicable health care and drug regulatory regimes are continuing to evolve and new requirements may be implemented. Ensuring and maintaining compliance with these evolving requirements is and will continue to be difficult, time-consuming and costly. If we fail to comply with these regulatory requirements or fail to obtain and maintain required approvals, our target market will be reduced and our ability to generate turnover from abroad will be adversely affected.

Our Astora subsidiary could be adversely affected by special risks and requirements related to its previous business of manufacturing medical products.

Our Astora subsidiary is subject to various risks and requirements associated with it previously being a medical equipment manufacturer, which could have adverse effects. These include the following:

- potential and actual product liability claims for any defective or allegedly defective goods that are distributed; and
- increased government scrutiny and/or potential claims regarding the marketing of medical devices.

We are subject to health information privacy and data protection laws that include penalties for noncompliance.

We are subject to a number of privacy and data protection laws and regulations globally. The legislative and regulatory landscape for privacy and data security continues to evolve. There has been increased attention to privacy and data security issues in both developed and emerging markets with the potential to affect directly our business. This includes federal and state laws and regulations in the United States as well as in Europe and other markets. There has also been increased enforcement activity in the United States particularly related to data security breaches. A violation of these laws or regulations could subject us to penalties, fines and/or possible exclusion from Medicare or Medicaid. Such sanctions could materially and adversely affect our business, results of operations, financial condition and cash flows.

The expanding nature of our business in global markets exposes us to risks associated with adapting to emerging markets and taking advantage of growth opportunities.

The globalization of our business, including in Latin America, South Africa and Canada, may expose us to increased risks associated with conducting business in emerging markets. Any difficulties in adapting to emerging markets could impair our ability to take advantage of growth opportunities in these regions and a decline in the growth of emerging markets could negatively affect our business, results of operations or financial condition.

The expansion of our activities in emerging markets may further expose us to more volatile economic conditions and political instability. We also face competition from companies that are already well established in these markets. Our inability to adequately respond to the unique characteristics of these markets, particularly with respect to their regulatory frameworks, the difficulties in recruiting qualified personnel, potential exchange controls, weaker intellectual property protection, higher crime levels and corruption and fraud, could have a material adverse effect on our business.

Our policies and procedures, which are designed to help us, our employees and agents comply with various laws and regulations regarding corrupt practices and anti-bribery, cannot guarantee protection against liability for actions taken by businesses in which we invest. Failure to comply with domestic or international laws could result in various adverse consequences, including possible delay in the approval or refusal to approve a product, recalls, seizures, withdrawal of an approved product from the market, or the imposition of criminal or civil sanctions, including substantial monetary penalties.

In addition, differences in banking systems and business cultures could have an adverse effect on the efficiency of internal controls over financial reporting matters. Given the significant learning curve to fully understand the emerging markets' business, operating environment and the quality of controls in place, we may not be able to adequately assess the efficiency of internal controls over financial reporting or the effects of the laws and requirements of the local business jurisdictions.

Many jurisdictions require specific permits or business licenses, particularly if the business is considered foreign. These requirements may affect our ability to carry out our business operations in emerging markets.

Our international operations could expose us to various risks, including risks related to fluctuations in foreign currency exchange rates.

In 2016, 7.0% of our total turnover were from sources outside the U.S. Some of these sales were to governmental entities and other organizations with extended payment terms. A number of factors, including differing economic conditions, changes in political climate, differing tax regimes, changes in diplomatic and trade relationships, and political or economic instability in the countries where we do business, could affect payment terms and our ability to collect foreign receivables. We have little influence over these factors and changes could have a material adverse impact on our business. In particular, the risk of a debt default by one or more European countries and related European or national financial restructuring efforts may cause volatility in the value of the Euro. In addition, foreign sales are influenced by fluctuations in currency exchange rates, primarily the Canadian dollar, Euro, South African rand, Mexican peso, British pound and Australian dollar.

We face risks relating to the expected exit of the United Kingdom from the European Union.

On June 23, 2016, the United Kingdom held a remain-or-leave referendum on the United Kingdom's membership within the European Union, the result of which favored the Brexit. A process of negotiation will likely determine the future terms of the United Kingdom's relationship with the European Union, as well as whether the United Kingdom will be able to continue to benefit from the European Union's free trade and similar agreements. The timing of the Brexit and potential impact of Brexit on our market share, sales, profitability and results of operations is unclear. Depending on the terms of Brexit, economic conditions in the United Kingdom, the European Union and global markets may be adversely affected by reduced growth and volatility. The uncertainty before, during and after the period of negotiation is also expected to have a negative economic impact and increase volatility in the markets, particularly in the Eurozone. Such volatility and negative economic impact could, in turn, adversely affect the Group's business, results of operations, financial condition and cash flows.

The risks of selling and shipping products and of purchasing products across international borders may adversely impact our turnover, results of operations and financial condition.

The sale and shipping of our products and services across international borders is subject to extensive U.S. and foreign governmental trade regulations, such as various anti-bribery laws, including the U.S. Foreign Corrupt Practices Act, export control laws, customs and import laws, and anti-boycott laws. Our failure to comply with applicable laws and regulations could result in significant criminal, civil and administrative penalties, including, but not limited to, imprisonment of individuals, fines, denial of export privileges, seizure of shipments, restrictions on certain business activities, and exclusion or debarment from government contracting. Also, the failure to comply with applicable legal and regulatory obligations could result in the disruption of our shipping and sales activities.

In addition, some countries in which our subsidiaries sell products are, to some degree, subject to political, economic and/or social instability. Our non-U.S. sales operations expose us and our representatives, agents and distributors to risks inherent in operating in non-U.S. jurisdictions. These risks include:

- the imposition of additional U.S. and non-U.S. governmental controls or regulations;
- the imposition of costly and lengthy new export licensing requirements;
- the imposition of U.S. and/or international sanctions against a country, company, person or entity with whom the company does business that would restrict or prohibit continued business with the sanctioned country, company, person or entity;
- economic and political instability or disruptions, including local and regional instability, or disruptions due to natural disasters, such as severe weather and geological events, disruptions due to civil unrest and hostilities, rioting, military activity, terror attacks or armed hostilities;
- changes in duties and tariffs, license obligations and other non-tariff barriers to trade;
- the imposition of new trade restrictions;
- imposition of restrictions on the activities of foreign agents, representatives and distributors;
- foreign tax authorities imposing significant fines, penalties and additional taxes;
- pricing pressure that we may experience internationally;
- laws and business practices favoring local companies;
- difficulties in enforcing or defending intellectual property rights; and
- exposure to different legal and political standards due to our conducting business in several foreign countries.

We cannot provide assurance that one or more of these factors will not harm our business. Additionally, we are experiencing fluidity in regulatory and pricing trends as a result of the PPACA and the Health Care and Education Reconciliation Act of 2010. Any material decrease in our non-U.S. sales would adversely impact our results of operations and financial condition.

We have substantial amount of indebtedness which could adversely affect our financial position and prevent us from fulfilling our obligations under such indebtedness, which may require us to refinance all or part of our then outstanding indebtedness. Any refinancing of this substantial indebtedness could be at significantly higher interest rates. Despite our current level of indebtedness, we may still be able to incur substantially more indebtedness. This could increase the risks associated with our substantial indebtedness.

We currently have a substantial amount of indebtedness. As of December 31, 2016, we have total debt of approximately $8.40 billion in aggregate principal amount. Our substantial indebtedness may:

- make it difficult for us to satisfy our financial obligations, including making scheduled principal and interest payments on our indebtedness;
- limit our ability to borrow additional funds for working capital, capital expenditures, acquisitions or other general business purposes;
- limit our ability to use our cash flow or obtain additional financing for future working capital, capital expenditures, acquisitions or other general business purposes;
- expose us to the risk of rising interest rates with respect to the borrowings under our credit facility, which are at variable rates of interest;
- require us to use a substantial portion of our cash flow from operations to make debt service payments;
- limit our flexibility to plan for, or react to, changes in our business and industry;
- place us at a competitive disadvantage compared to our less leveraged competitors; and
- increase our vulnerability to the impact of adverse economic and industry conditions.

If we are unable to pay amounts due under our outstanding indebtedness, or to fund other liquidity needs, such as future capital expenditures, we may be required to refinance all or part of our then existing indebtedness, sell assets, reduce or delay capital expenditures or seek to raise additional capital, any of which could have a material adverse effect on our operations. There can be no assurance that we will be able to accomplish any of these alternatives on terms acceptable to us, or at all. Any refinancing of this substantial indebtedness could be at significantly higher interest rates, which will depend on the conditions of the markets and our financial condition at such time. In addition, we and our subsidiaries may be able to incur substantial additional indebtedness in the future. If new indebtedness is added to our current debt levels, the related risks that we and our subsidiaries now face could intensify.

Covenants in our debt agreements restrict our business in many ways, a default of which may result in acceleration of certain of our indebtedness.

We are subject to various covenants in the instruments governing our debt that limit our ability and/or our restricted subsidiaries' ability to, among other things:

- incur or assume liens or additional debt or provide guarantees in respect of obligations of other persons;
- issue redeemable stock and preferred stock;
- pay dividends or distributions or redeem or repurchase capital stock;
- prepay, redeem or repurchase debt;
- make loans, investments and capital expenditures;
- enter into agreements that restrict distributions from our subsidiaries;
- sell assets and capital stock of our subsidiaries;
- enter into certain transactions with affiliates; and
- consolidate or merge with or into, or sell substantially all of our assets to, another person.

A breach of any of these covenants could result in a default under our indebtedness. If there were an event of default under any of the agreements relating to our outstanding indebtedness, the holders of the defaulted debt could cause all amounts outstanding with respect to that debt to be due and payable immediately, terminate all commitments to extend further credit, enforce liens against the assets securing or otherwise supporting the debt and pursue other legal remedies. The instruments governing our debt contain cross-default or cross-acceleration provisions that may cause all of the debt issued under such instruments to become immediately due and payable as a result of a default under an unrelated debt instrument. An event of default or an acceleration under one debt agreement could cause a cross-default or cross-acceleration of other debt agreements. We cannot confirm to you that our assets or cash flow would be sufficient to fully repay borrowings under our outstanding debt instruments if the obligations thereunder were accelerated upon an event of default. We may need to conduct asset sales or elect to pursue other alternatives, including proceedings under applicable insolvency laws relating to some or all of our business. Any or all of the above could have a material adverse effect on our business, financing activities, financial conditions and operations. For a description of our indebtedness, see Note 12. Debt in the accompanying Consolidated Financial Statements included in this report.

The IRS may not agree with the conclusion that we should be treated as a non-U.S. corporation for U.S. federal income tax purposes following the Paladin transaction.

Although we are incorporated in Ireland, the U.S. Internal Revenue Service (IRS) may assert that we should be treated as a U.S. corporation (and, therefore, a U.S. tax resident) for U.S. federal income tax purposes pursuant to Section 7874 of the Internal Revenue Code (the Code). A corporation is generally considered a tax resident in the jurisdiction of its organization or incorporation for U.S. federal income tax purposes. Because we are an Irish incorporated entity, we would generally be classified as a non-U.S. corporation (and, therefore, a non-U.S. tax resident) under these rules. Section 7874 provides an exception pursuant to which a non-U.S. incorporated entity may, in certain circumstances, be treated as a U.S. corporation for U.S. federal income tax purposes.

Under Section 7874, we would be treated as a non-U.S. corporation for U.S. federal income tax purposes if the former shareholders of EHSI owned immediately after the Paladin transaction (within the meaning of Section 7874) less than 80% (by both vote and value) of Endo shares by reason of holding shares in EHSI (the ownership test). The former EHSI shareholders owned less than 80% (by both vote and value) of the shares in Endo after the Paladin merger by reason of their ownership of shares in EHSI. As a result, under current law, we are expected to be treated as a non-U.S. corporation for U.S. federal income tax purposes. There is limited guidance regarding the application of Section 7874 of the Code, including with respect to the provisions regarding the application of the ownership test. Our obligation to complete the Paladin transactions was conditional upon its receipt of a Section 7874 opinion from our counsel, Skadden, Arps, Slate, Meagher & Flom LLP (Skadden), dated as of the closing date of the Paladin transaction and subject to certain qualifications and limitations set forth therein, to the effect that Section 7874 of the Code and the regulations promulgated thereunder should not apply in such a manner so as to cause Endo to be treated as a U.S. corporation for U.S. federal income tax purposes from and after the closing date. However, an opinion of tax counsel is not binding on the IRS or a court. Therefore, there can be no assurance that the IRS will not take a position contrary to Skadden's Section 7874 opinion or that a court will not agree with the IRS in the event of litigation.

The effective rate of taxation upon our results of operations is dependent on multi-national tax considerations.

We earn a portion of our profit outside the United States. That portion of our earnings is taxed at the more favorable rates applicable to the activities undertaken by our subsidiaries outside of the United States. Our effective income tax rate in the future could be adversely affected by a number of factors, including changes in the mix of earnings in countries with differing statutory tax rates, changes in the valuation of deferred tax assets and liabilities, changes in tax laws, the outcome of income tax audits, and repatriation of earnings from our subsidiaries for which we have not provided for taxes. Cash repatriations are subject to restrictions in certain jurisdictions and may be subject to withholding and other taxes. We are subject to the examination of our tax returns and tax arrangements by the IRS and other tax and governmental authorities. For example, our transfer pricing has been the subject of IRS audits, and may be the subject of future audits by the IRS or other tax authorities, and we may be subject to tax assessments or the reallocation of profit among our subsidiaries. We regularly assess all of these matters to determine the adequacy of our tax provisions, which are subject to significant discretion. Although we believe our tax provisions are adequate, the final determination of tax audits and any related disputes could be materially different from our historical income tax provisions and accruals. The results of audits and disputes could have a material adverse effect on our financial statements for the period or periods for which the applicable final determinations are made.

Future changes to U.S. and non-U.S. tax laws could materially adversely affect us.

Under current law, we are expected to be treated as a non-U.S. corporation for U.S. federal income tax purposes. However, changes to the rules in Section 7874 of the Code or regulations promulgated thereunder or other guidance issued by the Treasury or the IRS could adversely affect our status as a non-U.S. corporation for U.S. federal income tax purposes, and any such changes could have prospective or retroactive application to us, EHSI, and/or their respective shareholders and affiliates. Consequently, there can be no assurance that there will not exist in the future a change in law that might cause us to be treated as a U.S. corporation for U.S. federal income tax purposes, including with retroactive effect.

In addition, recent U.S. legislative proposals would expand the scope of U.S. corporate tax residence and limit deductibility of interest and/or other payments made by our U.S. subsidiaries to non-U.S. persons from which we currently benefit. If such a change in law were enacted, it could have a material adverse effect on our financial statements.

Further, the U.S. Congress, the Organization for Economic Co-operation and Development, the European Commission and other Government agencies in jurisdictions where we and our affiliates do business have had an extended focus on issues related to the taxation of multinational corporations and there are several current legislative proposals that, if enacted, would substantially change the taxation of multinational corporations. One example is in the area of "base erosion and profit shifting," where payments are made between affiliates from a jurisdiction with high tax rates to a jurisdiction with lower tax rates. As a result, the tax laws in the jurisdictions in which we operate could change on a prospective or retroactive basis, and any such changes could increase our effective tax rate, materially adversely impacting our financial statements and cash flows from operations.

We may not be able to successfully maintain our low tax rates, which could adversely affect our businesses and financial condition, results of operations and growth prospects.

We are incorporated in Ireland and also maintain subsidiaries in, amongst other jurisdictions, the United States, Canada, Mexico, India, Bermuda, the United Kingdom, Luxembourg, and South Africa. The IRS and other taxing authorities may challenge intercompany arrangements. Responding to or defending such a challenge could be expensive, consume time and other resources, and divert management's attention. We cannot predict whether taxing authorities will conduct an audit challenging our tax positions, the cost involved in responding to and defending any such audit and resulting litigation, or the outcome. If we are unsuccessful, we may be required to pay taxes for prior periods, interest, fines or penalties, and may be obligated to pay increased taxes in the future, any of which could require us to reduce our operating expenses, decrease efforts in support of our products or seek to raise additional funds, all of which could have a material adverse effect on our business, financial statements, results of operations and growth prospects.

Our ability to use U.S. tax attributes to offset U.S. taxable profit may be limited.

Existing and future tax laws and regulations may limit our ability to use U.S. tax attributes, including net operating losses, to offset U.S. taxable profit. For a period of time following the 2014 Paladin transaction, Section 7874 precludes our U.S. affiliates from utilizing U.S. tax attributes to offset taxable profit if we complete certain transactions with related non-U.S. subsidiaries. In addition, the U.S. Treasury Department recently issued new temporary and proposed regulations related to corporate inversions and earnings stripping. The limitations on the use of certain tax attributes and deductions in these regulations are in addition to existing rules that could impose more restrictive limitations in the event that cumulative changes in our stock ownership within a three-year period exceed certain thresholds. Such changes or the adoption of additional limitations could impact our overall utilization of deferred tax assets, potentially resulting in a material adverse impact to our financial statements and cash flows from operations.

Any attempts to take us over will be subject to Irish Takeover Rules and subject to review by the Irish Takeover Panel.

We are subject to Irish Takeover Rules, under which our board of directors (Board of Directors) will not be permitted to take any action which might frustrate an offer for our ordinary shares once it has received an approach which may lead to an offer or has reason to believe an offer is imminent.

If pharmaceutical companies are successful in limiting the use of generics through their legislative, regulatory and other efforts, our sales of generic products may suffer.

Many pharmaceutical companies increasingly have used state and federal legislative and regulatory means to delay generic competition. These efforts have included:

- pursuing new patents for existing products which may be granted just before the expiration of earlier patents, which could extend patent protection for additional years;
- using the Citizen Petition process (e.g., under 21 C.F.R. s. 10.30) to request amendments to FDA standards;
- attempting to use the legislative and regulatory process to have drugs reclassified or rescheduled or to set definitions of abuse deterrent formulations to protect brand company patents and profits; and
- engaging in state-by-state initiatives to enact legislation that restricts the substitution of some generic drugs.

If pharmaceutical companies or other third parties are successful in limiting the use of generic products through these or other means, our sales of generic products may decline. If we experience a material decline in generic product sales, our results of operations, financial condition and cash flows will suffer.

We have limited experience in manufacturing biologic products and may encounter difficulties in our manufacturing processes, which could materially adversely affect our results of operations or delay or disrupt manufacture of those of our products that are reliant upon our manufacturing operations.

The manufacture of biologic products requires significant expertise and capital investment. Although our subsidiary, Auxilium, leased its facilities in Horsham, Pennsylvania in order to have direct control over the manufacturing of the active ingredient of XIAFLEX®, we have limited experience in manufacturing XIAFLEX® or any other biologic product. Biologics such as XIAFLEX® require processing steps that are highly complex and generally more difficult than those required for most chemical pharmaceuticals. In addition, TESTOPEL® is manufactured using a unique, proprietary process. If our manufacturing processes at the Rye, New York facility or Horsham facility are disrupted, it may be difficult to find alternate manufacturing sites. We may encounter difficulties with the manufacture of the active ingredient of XIAFLEX® or TESTOPEL®, which could delay, disrupt or halt our manufacture of XIAFLEX® and TESTOPEL®, respectively, require write-offs which may affect our financial results, result in product recalls or product liability claims or otherwise materially affect our results of operations.

Likely Future Developments

We estimate that our 2017 total turnover will be between $3.45 billion and $3.60 billion. This estimate reflects an anticipated decline in our U.S. Generic Pharmaceuticals segment driven by a decline in the base business partially offset by growth in our Sterile Injectables and new launch turnover; a decline in our U.S. Branded Pharmaceuticals segment resulting from the annualization of the loss of exclusivity for Voltaren® Gel and Frova® and the continued decline in the legacy pain portfolio, partially offset by the growth of XIAFLEX® and our other Specialty business products; and the divestiture of the South African Litha Healthcare Group Limited and competitive pressures in our International Pharmaceuticals segment. The Group anticipates improved margins in 2017 driven by product rationalization in our U.S. Generic Pharmaceuticals segment and targeted cost reductions in selling, general and administrative expenses. We will continue to invest in XIAFLEX® and other core products to position the Group for long-term success. There can be no assurance that we will achieve these results.

Accounting Records

The directors are responsible for ensuring that Endo International plc (Company) and its subsidiaries keep accounting records and appropriate accounting systems. To achieve this, the directors have appointed a Chief Financial Officer who makes regular reports to the Board of Directors and ensures compliance with the requirements of Section 281 to 285 of the Companies Act, 2014. The Chief Financial Officer makes regular reports to the Audit Committee of the Board of Directors. The Audit Committee, in turn, briefs the full Board of Directors on significant financial matters arising from reports of the Chief Financial Officer and the external auditor. The measures taken by the directors to secure compliance with the Group's obligation to keep accounting records are the use of appropriate systems and procedures and employment of competent persons. The accounting records are kept at 1400 Atwater Drive, Malvern, PA 19355.

Significant Events Since Year End

Disposition of Litha Business

On February 27, 2017, the Group entered into a definitive agreement to sell Litha to Acino Pharma AG for up to $100 million in cash. The purchase price payable at the closing is subject to adjustments, including net working capital and net indebtedness adjustments. The transaction is expected to close in the second quarter of 2017 and is subject to customary conditions, including the expiration or termination of any applicable waiting periods under applicable competition laws. The assets and liabilities of the Litha business are classified as held for sale in the Consolidated Balance Sheet as of December 31, 2016. Refer to Note 3. Discontinued Operations and Held for Sale for further discussion.

Impairments

Pursuant to an existing agreement with a wholly owned subsidiary of Novartis AG (Novartis), Paladin licensed the Canadian rights to commercialize serelaxin, an investigational drug for the treatment of acute heart failure (AHF). On March 22, 2017, Novartis announced that a Phase III study of serelaxin in patients with AHF failed to meet its primary endpoints. As a result, Endo has concluded that its serelaxin in-process research and development intangible asset is fully impaired resulting in a $45 million impairment charge. In addition and as a result of the serelaxin impairment, Endo is in the process of assessing the recoverability of its Paladin goodwill balance. Based on the work completed to date, Endo has determined that the estimated fair value of Paladin’s goodwill is below its book value resulting in a goodwill impairment charge. The current estimate of the goodwill impairment charge is approximately $83 million. We expect that these impairments will be recorded in the first quarter of 2017.

In addition to the items mentioned above, Endo has identified certain market conditions impacting the recoverability of a developed technology intangible asset in its U.S. Generic Pharmaceuticals segment. As a result, Endo has determined that the intangible asset is impaired. Based on the work completed to date, the current estimate of the non-cash impairment charge related to this intangible asset is approximately $50 million, which we expect to record in the first quarter of 2017.

April 2017 Refinancing

Endo International plc intends to enter into a new credit agreement (the 2017 Credit Agreement) on April 27, 2017 as a guarantor, together with its subsidiaries Endo Luxembourg Finance Company I S.à r.l., and Endo LLC as borrowers, the lenders party thereto and JPMorgan Chase Bank, N.A., as administrative agent, issuing bank and swingline lender. The 2017 Credit Agreement will provide for (i) a five-year revolving credit facility in a principal amount of approximately $1,000.0 million (the 2017 Revolving Credit Facility) and (ii) a seven-year term loan facility in a principal amount of approximately $3,415.0 million (the 2017 Term Loan Facility), provided that each of the 2017 Revolving Credit Facility and the 2017 Term Loan Facility may mature prior to its respective stated maturity in the event that certain of our senior notes are not refinanced or repaid in full prior to the date that is 91 days before the stated maturity of such notes. Any outstanding amounts borrowed pursuant to the 2017 Credit Facility will immediately mature if any of the following of our senior notes are not refinanced or repaid in full prior to the date that is 91 days prior to the stated maturity date thereof:

Instrument	Maturity Date
7.25% Senior Notes due 2022	January 15, 2022
5.75% Senior Notes due 2022	January 15, 2022
5.375% Senior Notes due 2023	January 15, 2023
6.00% Senior Notes due 2023	July 15, 2023

The obligations under the 2017 Credit Agreement will be guaranteed by Endo International plc and its material subsidiaries, as defined in the 2017 Credit Agreement, and certain other subsidiaries from time to time (with certain exceptions) and secured by a lien on substantially all the assets (with certain exceptions) of the borrowers and the guarantors. The 2017 Credit Agreement contains affirmative and negative covenants that the Group believes to be usual and customary for a senior secured credit facility of this type. The negative covenants include, among other things, limitations on asset sales, mergers and acquisitions, indebtedness, liens, dividends, investments and transactions with the Group's affiliates. Borrowings under the 2017 Revolving Credit Facility will bear interest at a rate equal to an applicable margin plus London Interbank Offered Rate (LIBOR). In addition, borrowings under our 2017 Term Loan Facility will bear interest at a rate equal to an applicable margin plus LIBOR, subject to a LIBOR floor of 0.75%.

Also on April 27, 2017, Endo DAC, Endo Finance LLC and Endo Finco Inc. (collectively, the Issuers) intend to issue $300.0 million in aggregate principal amount of 5.875% senior secured notes due 2024 (the 2024 Notes). The 2024 Notes will be issued in a private offering for resale to "qualified institutional buyers" (as defined in Rule 144A under the Securities Act) and outside the United States to non-U.S. persons in compliance with Regulation S under the Securities Act. The 2024 Notes will be senior secured obligations of the Issuers and will be: (a) guaranteed by Endo International plc and its subsidiaries that also guarantee the 2017 Credit Agreement and certain other material indebtedness and (b) secured by a lien on the same collateral that secures the 2017 Credit Agreement. Interest on the 2024 Notes will be payable semiannually in arrears on April 15 and October 15 of each year, beginning on October 15, 2017. The 2024 Notes will mature on October 15, 2024, subject to earlier repurchase or redemption in accordance with the terms of the 2024 Notes indenture. On or after April 15, 2020, the Issuers may on any one or more occasions redeem all or a part of the 2024 Notes, at the redemption prices (expressed as percentages of principal amount) set forth below, plus accrued and unpaid interest and additional interest, if any, on the notes redeemed if redeemed during the twelve-month period beginning on April 15 of the years indicated below:

Year	Percentage
2020	102.938%
2021	101.469%
2022 and thereafter	100.000%

At any time prior to April 15, 2020, the Issuers may on any one or more occasions redeem all or a part of the 2024 Notes at a redemption price equal to 100% of the principal amount of the notes redeemed, plus the applicable premium as defined in the 2024 Notes indenture, plus accrued and unpaid interest and additional interest, if any. In addition, prior to April 15, 2020, the Issuers may, subject to certain restrictions and limitations, redeem up to 35% of the aggregate principal amount of the 2024 Notes with the net cash proceeds from specified equity offerings at a redemption price equal to 105.875% of the aggregate principal amount of the 2024 Notes redeemed, plus accrued and unpaid interest and additional interest, if any. In certain circumstances, the Issuers must offer to repurchase the 2024 Notes at 101% of their principal amount, plus accrued and unpaid interest and additional interest, if any. The 2024 Notes indenture will contain covenants that, among other things, restrict the Group's ability and the ability of its restricted subsidiaries to incur certain additional indebtedness and issue preferred stock, make restricted payments, sell certain assets, enter into sale and leaseback transactions, agree to payment restrictions on the ability of restricted subsidiaries to make certain payments to Endo International plc or any of its restricted subsidiaries, create certain liens, merge, consolidate or sell all or substantially all of the Group's assets, or enter into certain transactions with affiliates. These covenants will be subject to a number of important exceptions and qualifications, including the fall away or revision of certain of these covenants and release of the collateral upon the 2024 Notes receiving investment grade credit ratings.

The Group will use the net proceeds under the 2017 Term Loan Facility, together with the net proceeds of the 2024 Notes and cash on hand, to repay all of its outstanding loans under its existing credit facilities and to pay related fees and expenses. We intend to use the proceeds of the 2017 Revolving Credit Facility from time to time for general corporate purposes.

FDA Advisory Committees' Vote Related to OPANA® ER

In March 2017, we announced that the FDA's Drug Safety and Risk Management and Anesthetic and Analgesic Drug Products Advisory Committees (the Committees) voted that the benefits of reformulated OPANA® ER (oxymorphone hydrochloride extended release) no longer outweigh its risks. While several of the Committee members acknowledged the role of OPANA® ER in clinical practice, others believed its benefits are now outweighed by the continuing public health concerns around the product's misuse, abuse and diversion. During the Committees' discussion following the vote, a number of Committee members recommended that OPANA® ER remain on the market with additional regulatory restrictions to mitigate the risks. The FDA convened these Committees to discuss pre- and post-marketing data about the abuse of OPANA® ER, the product's overall risk-benefit profile, as well as the abuse of generic oxymorphone ER and oxymorphone immediate-release products. While the FDA will consider the Committees' vote, any decision regarding whether to take regulatory action rests solely with the FDA.

Somar

As previously disclosed on its February 28, 2017 earnings conference call, the Group is assessing strategic alternatives for its Somar business. Should this strategic process continue to advance successfully, the assets and liabilities of the Somar business may eventually be classified as held-for-sale in the Group's consolidated balance sheets.

Directors and Secretary

The names of the persons who were directors at any time during the year ended December 31, 2016 are set out below. Unless indicated otherwise, they served as directors for the entire year.

Directors	Date of Service as Director or Secretary
Roger H. Kimmel	(Appointed 28 February 2014)
Paul Campanelli	(Appointed 23 September 2016)
Shane M. Cooke	(Appointed 29 July 2014)
Arthur J. Higgins(1)	(Appointed 28 February 2014)
Nancy J. Hutson, Ph.D.	(Appointed 28 February 2014)
Michael Hyatt	(Appointed 28 February 2014)
Douglas S. Ingram	(Appointed 05 May 2016)
William P. Montague	(Appointed 28 February 2014)
Todd B. Sisitsky	(Appointed 05 May 2016)
Jill D. Smith	(Appointed 28 February 2014)
William F. Spengler	(Appointed 28 February 2014)
Secretary	
Orla Dunlea	(Appointed 17 September 2014)
Assistant Secretary	
Deanna Voss	(Appointed 28 February 2014)

(1) Arthur J. Higgins resigned as director effective 31 March 2017 as a result of his recent appointment as president and chief executive officer of another company. There were no disagreements between Mr. Higgins and the Group, its management or the other directors on any matters relating to the Group's operations, policies or practices.

Directors' and Secretary's Interests

No director, the secretary or any member of their immediate families had any interest in shares or debentures of any subsidiary. Directors' remuneration is set forth in Note 26. Directors Remuneration of the accompanying Consolidated Financial Statements of this report. The beneficial interests, including the interests of spouses and minor children, of the directors and secretary in office at December 31, 2016 in the share capital of Endo International plc were as follows:

	Ordinary Shares at 31 December 2016 (1)			Ordinary Shares at 1 January 2016 (or date of appointment if later) (1)		
Directors	Shares	Options (2)	Other Share Units (3)	Shares	Options (2)	Other Share Units (3)
Roger H. Kimmel	234,773	8,094	21,589	226,773	14,858	21,589
Paul Campanelli	202,930	526,440	152,458	201,069	96,795	156,300
Shane M. Cooke	17,290	—	—	10,179	—	—
Arthur J. Higgins (4)	50,623	—	—	22,771	—	—
Nancy J. Hutson, Ph.D.	30,062	13,185	6,515	26,364	13,185	6,515
Michael Hyatt	260,672	29,809	—	256,974	29,809	—
Douglas S. Ingram	4,890	—	—	4,890	—	—
William P. Montague	16,120	18,478	23,108	12,422	18,478	23,108
Todd B. Sisitsky (5)	—	—	—	—	—	—
Jill D. Smith	19,785	—	—	16,087	—	—
William F. Spengler	25,727	23,649	23,108	20,029	23,649	23,108
Secretary						
Orla Dunlea	1,190	14,392	5,281	410	4,755	1,138

(1) All interests declared are in the ordinary shares of $0.0001 par value of Endo International plc.

(2) Amounts include vested and unvested options.

(3) Amounts include vested and unvested restricted share units and performance share units.

(4) Arthur J. Higgins resigned as director effective 31 March 2017 as a result of his recent appointment as president and chief executive officer of another company. There were no disagreements between Mr. Higgins and the Group, its management or the other directors on any matters relating to the Group's operations, policies or practices.

(5) Mr. Sisitsky has waived all rights to receive any annual cash retainer fees, meeting fees, share-based awards, or other compensation of any kind (other than certain rights to indemnification, directors and officers insurance and expense reimbursement) in connection with his service as a director of the Group.

Dividends

The Group did not pay any dividends to ordinary shareholders and minority interests during 2016.

Political Donations

The electoral (Amendment) (Political Funding) Act 2012 requires companies to disclose all political donations over 200 euro in aggregate made during the financial year. The Directors, on inquiry, have satisfied themselves that no such donations have been made by the Group during the financial year.

Subsidiary Companies and Branches

Information regarding subsidiary undertakings and associates is provided in Note 28. Subsidiaries of the accompanying Consolidated Financial Statements of this report. The Group does not operate any branches outside of the State.

Going Concern

The Board has formed a judgment at the time of approving the financial statements that there is a reasonable expectation that the Group and the Company have adequate resources to continue in operational existence for the foreseeable future. In arriving at this conclusion, the Board has taken account of current and anticipated trading performance, together with the current and anticipated levels of net debt and the availability of the committed borrowing facilities. For this reason, the going concern basis continues to be adopted in the preparation of the Group and the Company financial statements.

Disclosure of Information to the Auditor

For the purposes of section 330 of the Companies Act 2014, each of the persons who are Directors at the date of approval of this report individually confirm that:

- In so far as they are aware, there is no relevant audit information, as defined in section 330, of which the Group's auditor is unaware; and
- That they have taken all the steps that they ought to have taken as a Director in order to make themselves aware of any relevant audit information and to establish that the Group's auditor is aware of such information.

Audit Committee

In accordance with Section 167 of the Companies Act 2014, Endo has an audit committee, which meets the requirements of the Companies Act.

Annual Compliance Statement of Endo International Plc (the Company)

The Directors acknowledge that they are responsible for securing compliance by the Company with its Relevant Obligations as defined in Section 225 of the Companies Act, 2014 (the Relevant Obligations).

The Directors confirm that they have drawn up and adopted a compliance policy statement setting out the Company's policies that, in the Directors' opinion, are appropriate to the Company respecting compliance with its Relevant Obligations.

The Directors further confirm the Company has put in place appropriate arrangements or structures that are, in the Directors' opinion, designed to secure material compliance with its Relevant Obligations including reliance on the advice of persons employed by the Company and external legal and tax advisers as considered appropriate from time to time and that they have reviewed the effectiveness of these arrangements or structures during the financial year to which this report relates.

Annual General Meeting

The Annual General Meeting of the Group will take place at First Floor, Minerva House, Simmonscourt Road, Ballsbridge, Dublin 4, Ireland, on June 8, 2017.

Auditors

PricewaterhouseCoopers (PwC) were appointed as auditors during the year and have expressed their willingness to continue in office in accordance with Section 383 (2) of the Companies Act, 2014.

On behalf of the Directors

/s/ Roger H. Kimmel	/s/ Paul Campanelli
Roger H. Kimmel	Paul Campanelli
Chairman	*Director*

April 26, 2017

ENDO INTERNATIONAL PLC
STATEMENT OF DIRECTOR'S RESPONSIBILITIES

The directors are responsible for preparing the Director's Report and the financial statements in accordance with Irish law.

Irish law requires the directors to prepare financial statements for each financial period giving a true and fair view of the Company's and of the Group's assets, liabilities and financial position as of the end of the financial year and of the profit or loss of the Group for the financial year. Under that law the directors have prepared the Group's financial statements in accordance with accounting principles generally accepted in the United States of America (U.S. GAAP), as defined in Section 279 (1) of Part 6 of the Companies Act 2014, to the extent that the use of those principles in the preparation of the financial statements does not contravene any provision that is part of the Companies Act 2014. The directors have elected to prepare the Company financial statements in accordance with Generally Accepted Accounting Principles in Ireland (accounting standards issued by the Financial Reporting Council and promulgated by the Institute of Chartered Accountants in Ireland), including Financial Reporting Standard 102 *The Financial Reporting Standard applicable in the UK and Republic of Ireland*.

Under Irish law, the directors shall not approve the financial statements unless they are satisfied that they give a true and fair view of the Parent Company's and of the Group's assets, liabilities and financial position as of the end of the financial year and the profit or loss of the Group for the financial year.

In preparing these financial statements, the directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgments and estimates that are reasonable and prudent;
- prepare the financial statements on the going concern basis, unless it is inappropriate to presume that the Company and the Group will continue in business, and;
- state that the Group financial statements comply with U.S. GAAP to the extent that it does not contravene Irish Company Law and that the Company financial statements comply with the accounting standards issued by the Financial Reporting Council and promulgated by the Institute of Chartered Accountants in Ireland, including Financial Reporting Standard 102 *The Financial Reporting Standard applicable in the UK and Republic of Ireland*.

The directors are responsible for keeping adequate accounting records that are sufficient to:

- correctly record and explain the transactions of the Company and its subsidiaries;
- enable, at any time, the assets, liabilities, financial position and profit or loss of the Company and its subsidiaries to be determined with reasonable accuracy; and
- enable the directors to ensure that the financial statements comply with the Companies Act 2014 and enable those financial statements to be audited.

The directors are also responsible for safeguarding the assets of the Company and the subsidiaries and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The directors are responsible for the maintenance and integrity of the corporate and financial information included on its website (www.endo.com). Legislation in the Republic of Ireland governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

Independent auditors' report to the members of Endo International plc

Report on the financial statements

Our opinion

In our opinion:

- Endo International plc's consolidated and parent company financial statements (the "financial statements") give a true and fair view of the group's and parent company's assets, liabilities and financial position as at December 31, 2016 and of the group's loss and cash flows for the year then ended;
- the consolidated financial statements have been properly prepared, in accordance with accounting principles generally accepted in the United States of America ("US GAAP"), as defined in Section 279 of the Companies Act 2014, to the extent that the use of those principles in the preparation of the group financial statements does not contravene any provision of the Companies Act 2014 or of any regulations made thereunder;
- the parent company balance sheet has been properly prepared in accordance with Generally Accepted Accounting Practice in Ireland; and
- the financial statements have been properly prepared in accordance with the requirements of the Companies Act 2014.

What we have audited

The financial statements comprise:

- the consolidated and parent company balance sheets as at December 31, 2016;
- the consolidated profit and loss account for the year then ended;
- the consolidated statement of cash flows for the year then ended;
- the consolidated statement of comprehensive loss for the year then ended;
- the consolidated reconciliation of shareholders' funds for the year then ended;
- the parent company reconciliation of shareholders' funds for the year then ended; and
- the notes to the financial statements, which include a summary of significant accounting policies and other explanatory information.

The financial reporting framework that has been applied in the preparation of the group financial statements is Irish law and US GAAP, as defined in Section 279 of the Companies Act 2014, to the extent that the use of those principles in the preparation of the financial statements does not contravene any provision of the Companies Act 2014 or of any regulations made thereunder.

The financial reporting framework that has been applied in the preparation of the parent company financial statements is Irish law and accounting standards issued by the Financial Reporting Council and promulgated by the Institute of Chartered Accountants in Ireland (Generally Accepted Accounting Practice in Ireland), including FRS 102 "The Financial Reporting Standard applicable in the United Kingdom and the Republic of Ireland".

In applying the financial reporting framework, the directors have made a number of subjective judgments, for example in respect of significant accounting estimates. In making such estimates, they have made assumptions and considered future events.

Matters on which we are required to report by the Companies Act 2014

- We have obtained all the information and explanations which we consider necessary for the purposes of our audit.
- In our opinion, the accounting records of the parent company were sufficient to permit the parent company financial statements to be readily and properly audited.
- The parent company balance sheet is in agreement with the accounting records.
- In our opinion the information given in the Directors' Report is consistent with the financial statements.

Matter on which we are required to report by exception

Directors' remuneration and transactions

Under the Companies Act 2014 we are required to report to you if, in our opinion, the disclosures of directors' remuneration and transactions specified by sections 305 to 312 of that Act have not been made. We have no exceptions to report arising from this responsibility.

Responsibilities for the financial statements and the audit

Our responsibilities and those of the directors

As explained more fully in the Directors' Responsibilities Statement set out on page 57, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view.

Our responsibility is to audit and express an opinion on the financial statements in accordance with Irish law and International Standards on Auditing (UK and Ireland). Those standards require us to comply with the Auditing Practices Board's Ethical Standards for Auditors.

This report, including the opinions, has been prepared for and only for the company's members as a body in accordance with section 391 of the Companies Act 2014 and for no other purpose. We do not, in giving these opinions, accept or assume responsibility for any other purpose or to any other person to whom this report is shown or into whose hands it may come save where expressly agreed by our prior consent in writing.

What an audit of financial statements involves

We conducted our audit in accordance with International Standards on Auditing (UK and Ireland). An audit involves obtaining evidence about the amounts and disclosures in the financial statements sufficient to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or error. This includes an assessment of:

- whether the accounting policies are appropriate to the group's and the parent company's circumstances and have been consistently applied and adequately disclosed;
- the reasonableness of significant accounting estimates made by the directors; and
- the overall presentation of the financial statements.

We primarily focus our work in these areas by assessing the directors' judgments against available evidence, forming our own judgments, and evaluating the disclosures in the financial statements.

We test and examine information, using sampling and other auditing techniques, to the extent we consider necessary to provide a reasonable basis for us to draw conclusions. We obtain audit evidence through testing the effectiveness of controls, substantive procedures or a combination of both.

In addition, we read all the financial and non-financial information in the Irish Annual Report to identify material inconsistencies with the audited financial statements and to identify any information that is apparently materially incorrect based on, or materially inconsistent with, the knowledge acquired by us in the course of performing the audit. If we become aware of any apparent material misstatements or inconsistencies we consider the implications for our report.

Alisa Hayden
for and on behalf of PricewaterhouseCoopers
Chartered Accountants and Statutory Audit Firm
Dublin
April 26, 2017

ENDO INTERNATIONAL PLC
CONSOLIDATED PROFIT AND LOSS ACCOUNT
YEARS ENDED DECEMBER 31, 2016 AND 2015
(In thousands, except per share data)

	Note	2016	2015
TURNOVER		$ 4,010,274	$ 3,268,718
Cost of sales	2,6	2,634,973	2,075,651
GROSS PROFIT		1,375,301	1,193,067
Selling, general and administrative expenses		770,728	741,304
Research and development expenses		183,372	102,197
Litigation-related and other contingency expenses	13	23,950	37,082
Asset impairment charges	9,10	3,781,165	1,140,709
Acquisition-related and integration items	5	87,601	105,250
OPERATING LOSS		(3,471,515)	(933,475)
INTEREST EXPENSE, NET	12	452,679	373,214
LOSS ON EXTINGUISHMENT OF DEBT	12	—	67,484
OTHER (INCOME) EXPENSE, NET	17	(338)	63,691
LOSS ON ORDINARY ACTIVITIES BEFORE TAXATION		(3,923,856)	(1,437,864)
TAX ON LOSS ON ORDINARY ACTIVITIES	18	(700,084)	(1,137,465)
LOSS ON ORDINARY ACTIVITIES		(3,223,772)	(300,399)
DISCONTINUED OPERATIONS, NET OF TAX	3	(123,278)	(1,194,926)
LOSS FOR THE FINANCIAL YEAR		(3,347,050)	(1,495,325)
Less: Net profit (loss) attributable to minority interests		16	(283)
LOSS FOR THE FINANCIAL YEAR ATTRIBUTABLE TO ENDO INTERNATIONAL PLC		$ (3,347,066)	$ (1,495,042)
LOSS PER SHARE ON ORDINARY ACTIVITIES ATTRIBUTABLE TO ENDO INTERNATIONAL PLC ORDINARY SHAREHOLDERS - BASIC:			
Ordinary activities		$ (14.48)	$ (1.52)
Discontinued operations		$ (0.55)	$ (6.07)
Basic		$ (15.03)	$ (7.59)
LOSS PER SHARE ON ORDINARY ACTIVITIES ATTRIBUTABLE TO ENDO INTERNATIONAL PLC ORDINARY SHAREHOLDERS - DILUTED:			
Ordinary activities		$ (14.48)	$ (1.52)
Discontinued operations		$ (0.55)	$ (6.07)
Diluted		$ (15.03)	$ (7.59)
WEIGHTED AVERAGE NUMBER OF SHARES OUTSTANDING:			
Basic	19	222,651	197,100
Diluted	19	222,651	197,000

ENDO INTERNATIONAL PLC
CONSOLIDATED STATEMENT OF COMPREHENSIVE LOSS
YEARS ENDED DECEMBER 31, 2016 AND 2015
(In thousands)

	Note	2016	2015
LOSS FOR THE FINANCIAL YEAR		$ (3,347,050)	$ (1,495,325)
Net unrealized gain (loss) on securities	7,14	(920)	2,299
Foreign currency translation loss	14	31,729	(259,007)
TOTAL OTHER COMPREHENSIVE LOSS		$ (3,316,241)	$ (1,752,033)
Less: Comprehensive (loss) profit attributable to minority interests		16	(283)
Less: Other Comprehensive (loss) profit attributable to minority interests		38	(495)
TOTAL OTHER COMPREHENSIVE LOSS ATTRIBUTABLE TO ENDO INTERNATIONAL PLC		$ (3,316,295)	$ (1,751,255)

ENDO INTERNATIONAL PLC
CONSOLIDATED BALANCE SHEET
DECEMBER 31, 2016 AND 2015
(In thousands)

	Note	December 31, 2016	December 31, 2015
ASSETS			
Fixed Assets			
Intangible assets-Goodwill	10	$ 4,729,395	$ 7,299,354
Intangible assets-Other	10	5,859,297	7,828,942
Tangible assets	9	669,596	675,624
Current Assets			
Stock	8	555,671	752,493
Debtors	21	1,117,479	1,805,761
Investments	7	—	34
Cash at bank and in-hand		799,324	857,727
Assets held for sale	3	116,985	36,522
Long-Term Assets			
Investments	7	2,267	3,855
Other	21	425,095	90,024
TOTAL ASSETS		$ 14,275,109	$ 19,350,336
EQUITY AND LIABILITIES			
Capital and Reserves			
Called up share capital presented as equity	15	$ 64	$ 65
Share premium account	15	6,140,580	6,133,515
Other reserves		(9,803,602)	(9,877,163)
Profit and loss account		6,364,547	9,711,613
Total equity shareholders' funds		2,701,589	5,968,030
Minority interest		—	(54)
		2,701,589	5,967,976
Provision for liabilities			
Taxation including deferred taxation	18	201,563	879,591
Other provisions for liabilities	22	605,100	236,253
Total for provisions		806,663	1,115,844
Creditors			
Debenture loans	12	8,272,503	8,580,362
Trade and other creditors	22	2,470,016	3,665,939
Liabilities related to assets held for sale	3	24,338	20,215
Total for creditors		10,766,857	12,266,516
TOTAL EQUITY AND LIABILITIES		$ 14,275,109	$ 19,350,336

The accompanying notes are an integral part of these Consolidated Financial Statements.
The Consolidated Financial Statements were approved by the Board of Directors on April 26, 2017 and signed on its behalf by:

/s/ Roger H. Kimmel	/s/ Paul Campanelli
Roger H. Kimmel	Paul Campanelli
Chairman	*Director*

ENDO INTERNATIONAL PLC
CONSOLIDATED STATEMENT OF CASH FLOWS
YEARS ENDED DECEMBER 31, 2016 AND 2015
(In thousands)

	2016	2015
CASH FLOWS FROM OPERATING ACTIVITIES:		
Loss after tax	$ (3,347,050)	$ (1,495,325)
Adjustments to reconcile loss to cash flows from operating activities:		
Depreciation and amortization	983,309	632,756
Stock step-up	108,768	232,461
Share-based compensation	59,769	61,185
Amortization of debt issuance costs and premium/discount	28,514	23,604
Provision for bad debts	6,885	5,073
Provision for stock reserve	129,245	111,750
Deferred income taxes	(745,341)	(447,168)
Loss on disposal of tangible fixed assets, net	7,302	3,256
Change in fair value of contingent consideration	23,823	(65,640)
Loss on extinguishment of debt	—	67,484
Prepayment penalty on long-term debt	—	(31,496)
Asset impairment charges	3,802,493	1,390,281
Gain on sale of business and other assets	(4,110)	(13,550)
Changes in assets and liabilities:		
Accounts receivable	(7,387)	(274,994)
Stock	(62,369)	(82,620)
Prepaid and other assets	68,773	18,283
Accounts payable and accrued expenses	(682,515)	443,398
Other liabilities	(524,532)	69,926
Income taxes payable/receivable	678,862	(586,638)
Cash flows from operating activities	$ 524,439	$ 62,026
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchases of tangible fixed assets	(138,856)	(81,774)
Proceeds from sale of tangible fixed assets	6,762	—
Acquisitions, net of cash acquired	(30,394)	(7,650,404)
Proceeds from sale of investments	34	1,230
Proceeds from notes receivable, net	—	17
Patent acquisition costs and license fees	(19,206)	(43,968)
Proceeds from sale of business, net	4,108	1,588,779
Increase in restricted cash at bank and in-hand	(831,321)	(747,649)
Decrease in restricted cash at bank and in-hand	1,134,734	688,999
Cash flows from investing activities	$ 125,861	$ (6,244,770)

	2016	2015
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from issuance of notes	—	2,835,000
Proceeds from issuance of term loans	—	2,800,000
Principal payments on notes	—	(899,875)
Principal payments on term loans	(103,625)	(473,376)
Proceeds from draw of revolving debt	380,000	525,000
Repayments of revolving debt	(605,000)	(300,000)
Principal payments on other indebtedness, net	(7,736)	(10,070)
Repurchase of convertible senior subordinated notes	—	(247,760)
Sale of AMS mandatorily redeemable preferred shares	—	60,000
Redemption of AMS mandatorily redeemable preferred shares	—	(60,000)
Deferred financing fees	(500)	(125,111)
Payment for contingent consideration	(55,896)	(29,786)
Tax benefits of share awards	3,204	21,979
Payments of tax withholding for restricted shares	(11,500)	(15,398)
Exercise of options	1,952	27,217
Repurchase of ordinary shares	—	(250,088)
Issuance of common stock from treasury	5,119	4,299
Issuance of ordinary shares	—	2,300,000
Payments related to the issuance of ordinary shares	—	(66,956)
Cash buy-out of minority interests, net of cash contributions	—	(39,608)
Cash flows from financing activities	$ (393,982)	$ 6,055,467
Effect of foreign exchange rate	328	(7,068)
Movement in cash held for sale	(11,744)	997
NET (INCREASE) DECREASE IN CASH AT BANK AND IN-HAND OF ORDINARY ACTIVITIES	$ 244,902	$ (133,348)
CASH AT BANK AND IN-HAND, BEGINNING OF PERIOD	272,348	405,696
CASH AT BANK AND IN-HAND, END OF PERIOD	$ 517,250	$ 272,348
SUPPLEMENTAL INFORMATION:		
Cash paid for interest	429,172	284,985
Cash paid for income taxes	63,983	42,700
Cash received from U.S. Federal tax refunds	759,950	162,821
Cash paid into Qualified Settlement Funds for mesh legal settlements	831,131	743,132
Cash paid out of Qualified Settlement Funds for mesh legal settlements	1,134,734	649,391
Other cash distributions for mesh legal settlements	7,830	27,380
SCHEDULE OF NON-CASH INVESTING AND FINANCING ACTIVITIES:		
Purchases of tangible fixed assets financed by capital leases	$ 716	$ 4,234
Accrual for purchases of tangible fixed assets	$ 2,676	$ 4,476
Acquisition financed by ordinary shares	$ —	$ 2,844,568
Repurchase of convertible senior subordinated notes due 2015 financed by ordinary shares	$ —	$ 625,483

ENDO INTERNATIONAL PLC
CONSOLIDATED RECONCILIATION OF SHAREHOLDERS' FUNDS
YEARS ENDED DECEMBER 31, 2016 AND 2015
(In thousands)

	Endo International plc Shareholders						
	Share Capital	Share Premium	Profit and Loss Account	Treasury Shares	Other Reserves	Minority Interest	Total
BALANCE, JANUARY 1, 2015	$ 63	$ 597,798	$ 11,457,743	$ —	$ (9,680,847)	$ 33,456	$ 2,408,213
Net loss	—	—	(1,495,042)	—	—	(283)	(1,495,325)
Other comprehensive loss	—	—	—	—	(256,213)	(495)	(256,708)
Share-based payment activity	—	—	—	—	61,185	—	61,185
Shares issued under employee stock plans	—	27,574	—	—	(357)	—	27,217
Tax impact of stock awards, net	—	—	—	—	20,051	—	20,051
Issuance of ordinary shares related to the employee stock purchase plan	—	—	—	—	4,299	—	4,299
Ordinary shares issued	3	2,299,997	—	—	—	—	2,300,000
Equity issuance fees	—	(66,956)	—	—	—	—	(66,956)
Ordinary shares issued in connection with the Auxilium acquisition	2	1,519,318	—	—	—	—	1,519,320
Ordinary shares issued in connection with the Par acquisition	2	1,325,246	—	—	—	—	1,325,248
Tax withholding for restricted shares	—	—	—		(15,398)	—	(15,398)
Share repurchases	—	—	(251,088)	—	—	—	(251,088)
Buy-out of minority interests, net	—	—	—	—	(6,876)	(32,732)	(39,608)
Fair value of equity component of acquired Auxilium Notes	—	266,649	—	—	—	—	266,649
Conversion of Auxilium Notes	—	160,892	—	—	—	—	160,892
Other	(5)	2,997	—	—	(3,007)	—	(15)
BALANCE, DECEMBER 31, 2015	$ 65	$ 6,133,515	$ 9,711,613	$ —	$ (9,877,163)	$ (54)	$ 5,967,976
Net loss	—	—	(3,347,066)	—	—	16	(3,347,050)
Other comprehensive loss	—	—	—	—	30,771	38	30,809
Share-based payment activity	—	—	—	—	59,769	—	59,769
Shares issued under employee stock plans	—	1,952	—	—	—	—	1,952
Tax impact of stock awards, net	—	—	—	—	(5,449)	—	(5,449)
Issuance of ordinary shares related to the employee stock purchase plan	—	—	—	—	5,119	—	5,119
Tax withholding for restricted shares	—	—	—		(11,500)	—	(11,500)
Other	(1)	5,113	—	—	(5,149)	—	(37)
BALANCE, DECEMBER 31, 2016	64	6,140,580	6,364,547	—	(9,803,602)	—	2,701,589

NOTE 1. DESCRIPTION OF BUSINESS

Endo International plc is an Ireland-domiciled, global specialty pharmaceutical company focused on generic and branded pharmaceuticals. We aim to be the premier partner to healthcare professionals and payment providers, delivering an innovative suite of generic and branded drugs to meet patients' needs. Unless otherwise indicated or required by the context, references throughout to "Endo," the "Group," "we," "our," or "us" refer to financial information and transactions of Endo International plc and its consolidated subsidiaries thereafter. The accompanying Consolidated Financial Statements of Endo International plc and its subsidiaries have been prepared in accordance with United States (U.S.) generally accepted accounting principles (GAAP).

NOTE 2. BASIS OF PRESENTATION AND SIGNIFICANT ACCOUNTING POLICIES

The directors have elected to prepare the consolidated financial statements of Endo International plc in accordance with applicable Irish law and accounting principles generally accepted in the United States of America (U.S. GAAP), as defined in Section 279 (1) of Part 6 of the Companies Act 2014, to the extent that the use of those principles in the preparation of the financial statements does not contravene any provision of the Companies Acts or of any regulations made thereunder.

The separate financial statements of the Group have been prepared in accordance with the Companies Act 2014 and Financial Reporting Standard 102. The financial statements are presented in U.S. dollars.

The significant accounting policies adopted by the Group are as follows:

Consolidation and Basis of Presentation—The Consolidated Financial Statements include the accounts of wholly owned subsidiaries after the elimination of intercompany accounts and transactions.

Reclassifications—Certain prior period amounts have been reclassified to conform to the current period presentation.

The Group has modified its presentation of accounts payable and accrued expenses that had been in effect prior to December 31, 2016. The Group has combined amounts related to accounts payable and accrued expenses in its Consolidated Balance Sheets and Consolidated Statements of Cash Flows. The Group has applied this change retrospectively to all periods presented.

Use of Estimates—The preparation of our Consolidated Financial Statements in conformity with GAAP requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the Consolidated Financial Statements and the reported amounts of turnover and expenses during the reporting period. Significant estimates and assumptions are required in the determination of turnover recognition and sales deductions for estimated chargebacks, rebates, sales incentives and allowances, certain royalties, distribution service fees, returns and allowances. Significant estimates and assumptions are also required when determining the fair value of certain financial instruments, the valuation of long-lived and indefinite-lived intangible assets, goodwill, income taxes, contingencies and share-based compensation. Some of these judgments can be subjective and complex, and, consequently, actual results may differ from these estimates. Our estimates often are based on complex judgments, probabilities and assumptions that we believe to be reasonable but that are inherently uncertain and unpredictable. For any given individual estimate or assumption made by us, there may also be other estimates or assumptions that are reasonable.

We regularly evaluate our estimates and assumptions using historical experience and other factors, including the economic environment. As future events and their effects cannot be determined with precision, our estimates and assumptions may prove to be incomplete or inaccurate, or unanticipated events and circumstances may occur that might cause us to change those estimates and assumptions. Market conditions, such as illiquid credit markets, volatile equity markets, dramatic fluctuations in foreign currency rates and economic downturn, can increase the uncertainty already inherent in our estimates and assumptions. We adjust our estimates and assumptions when facts and circumstances indicate the need for change. Those changes generally will be reflected in our Consolidated Financial Statements on a prospective basis. It is possible that other professionals, applying reasonable judgment to the same facts and circumstances, could develop and support a range of alternative estimated amounts. We also are subject to other risks and uncertainties that may cause actual results to differ from estimated amounts, such as changes in the healthcare environment, competition, litigation, legislation and regulations.

Customer, Product and Supplier Concentration—We primarily sell our generic and branded pharmaceuticals to wholesalers, drug store chains, supermarket chains, mass merchandisers, distributors, mail order accounts, hospitals and government agencies. Our wholesalers and distributors purchase products from us and, in turn, supply products to retail drug store chains, independent pharmacies and managed health care organizations. Customers in the managed health care market include health maintenance organizations, nursing homes, hospitals, clinics, pharmacy benefit management companies and mail order customers. Total turnover from direct customers that accounted for 10% or more of our total consolidated turnover during the years ended December 31 are as follows:

	2016	2015
Cardinal Health, Inc.	26%	21%
McKesson Corporation	27%	31%
AmerisourceBergen Corporation	25%	23%

Turnover from these customers are included within our U.S. Generic Pharmaceuticals, U.S. Branded Pharmaceuticals and International Pharmaceuticals segments.

No products accounted for 10% or more of our total turnover during the years ended December 31, 2016 or 2015.

We have agreements with Novartis Consumer Health, Inc., Novartis AG, Sandoz, Inc., (collectively, Novartis) Teikoku Seiyaku Co., Ltd. (Teikoku), Noramco, Inc. (Noramco), Grünenthal GmbH (Grünenthal) and Jubilant HollisterStier Laboratories LLC (JHS), among others, for the manufacture and supply of several of our existing pharmaceutical products. See Note 13. Commitments and Contingencies for further information.

Turnover Recognition—

Pharmaceutical Products

Our net pharmaceutical product sales consist of turnover from sales of our pharmaceutical products, less estimates for chargebacks, rebates, sales incentives and allowances, certain royalties, distribution service fees, returns and allowances as well as fees for services. We recognize turnover for product sales when title and risk of loss has passed to the customer, which is typically upon delivery to the customer, when estimated provisions for turnover reserves are reasonably determinable, and when collectability is reasonably confirmed. Turnover from the launch of a new or significantly unique product may be deferred until such time that the product has achieved market acceptance. For these products, turnover is typically recognized based on dispensed prescription data and other information obtained prior to and during the period following launch.

Sales Deductions—When we recognize net sales from the sale of our pharmaceutical products, we record an adjustment to turnover for estimated turnover reserves. These provisions are estimated based on historical experience, estimated future trends, estimated customer stock levels, current contract sales terms with our direct and indirect customers and other competitive factors. If the assumptions we used to calculate these adjustments do not appropriately reflect future activity, our financial position, results of operations and cash flows could be materially impacted.

Research and Development (R&D)—Expenditures for research and development are expensed as incurred. In addition to upfront and milestone payments, total R&D expenses include the costs of discovery research, preclinical development, early- and late-clinical development and drug formulation, as well as clinical trials, medical support of marketed products, other payments under third-party collaborations and contracts and other costs. R&D spending also includes enterprise-wide costs which support our overall R&D infrastructure. Tangible fixed assets that are acquired or constructed for research and development activities and that have alternate future uses are capitalized and depreciated over their estimated useful lives on a straight-line basis. Upfront and milestone payments made to third parties in connection with agreements with third parties are generally expensed as incurred up to the point of regulatory approval. Payments made to third parties subsequent to regulatory approval are generally capitalized and amortized over the remaining useful life of the related product. Amounts capitalized for such payments are included in Other intangibles, net in the Consolidated Balance Sheets.

Cash at Bank and In-Hand—The Group considers all highly liquid money market instruments with an original maturity of three months or less when purchased to be cash equivalents. At December 31, 2016, cash equivalents were deposited in financial institutions and consisted of immediately available fund balances and time deposits. The Group maintains its cash deposits and cash equivalents with well-known and stable financial institutions.

Restricted Cash at Bank and In-Hand—Cash at bank and in-hand that are restricted as to withdrawal or use under the terms of certain contractual agreements are recorded in Restricted cash at bank and in-hand in the Consolidated Balance Sheets. At December 31, 2016, restricted cash at bank and in-hand totaled $282.1 million, of which $276.0 million is held in Qualified Settlement Funds (QSFs) for mesh product liability settlement agreements. The restricted cash related to QSFs are for payments related to the Group's vaginal mesh liability. See Note 13. Commitments and Contingencies for further information relating to the vaginal mesh liability. At December 31, 2015, restricted cash at bank and in-hand totaled $585.4 million, of which $579.0 million was held in QSFs for mesh product liability settlement agreements.

Marketable Securities—The Group has equity securities, which consist of investments in the stock of publicly traded companies. For additional information see Note 7. Fair Value Measurements.

Accounts Receivable—Accounts receivable are stated at their net realizable value. The allowance for doubtful accounts against gross accounts receivable reflects the best estimate of probable losses inherent in the receivables portfolio determined on the basis of historical experience, specific allowances for known troubled accounts and other currently available information. In addition, accounts receivable is reduced by certain sales deduction reserves where we have the right of offset with the customer.

Concentrations of Credit Risk—Financial instruments that potentially subject the Group to significant concentrations of credit risk consist primarily of cash equivalents, marketable debt securities and accounts receivable. We invest our excess cash in high-quality, liquid money market instruments and time deposits maintained by major U.S. banks and financial institutions. We have not experienced any losses on our cash equivalents.

We perform ongoing credit evaluations of our customers and generally do not require collateral. We have no history of significant losses from uncollectible accounts. Approximately 84% and 77% of our gross trade accounts receivable balance represent amounts due from three customers at December 31, 2016 and 2015, respectively.

We do not expect our current or future credit risk exposures to have a significant impact on our operations. However, there can be no assurance that our business will not experience any adverse impact from credit risk in the future.

Stock—Stock consists of finished goods held for distribution, raw materials and work-in-process. Our stock is stated at the lower of cost or market. Cost is determined by the first-in, first-out method. We write-down stock to net realizable value based on forecasted demand and market conditions, which may differ from actual results. Stock that is in excess of the amount expected to be sold within one year is classified as long-term stock and is recorded in Other Assets in the Consolidated Balance Sheets.

Tangible Fixed Assets—Tangible fixed assets are stated at cost less accumulated depreciation. Major improvements are capitalized, while routine maintenance and repairs are expensed as incurred. Costs incurred on assets under construction are capitalized as construction is in progress. Depreciation is computed over the estimated useful life of the related assets on a straight-line basis. Leasehold improvements and capital lease assets are depreciated on a straight-line basis over the shorter of their estimated useful lives or the terms of their respective leases. Depreciation is not recorded on assets held for sale. Gains and losses on disposals are included in Other (income) expense, net in the Consolidated Profit and Loss Account.

Depreciation is based on the following estimated useful lives, as of December 31, 2016:

	Range of Useful Lives, from:		
Buildings	10 years	to	40 years
Machinery and equipment	2 years	to	20 years
Leasehold improvements	2 years	to	20 years
Computer equipment and software	2 years	to	7 years
Assets under capital lease	Shorter of useful life or lease term		
Furniture and fixtures	3 years	to	10 years

Computer Software—The Group capitalizes certain costs incurred in connection with obtaining or developing internal-use software, including external direct costs of material and services, and payroll costs for employees directly involved with the software development. Capitalized software costs are included in Tangible fixed assets, net in the Consolidated Balance Sheets and amortized beginning when the software project is substantially complete and the asset is ready for its intended use. Costs incurred during the preliminary project stage and post-implementation stage, as well as maintenance and training costs, are expensed as incurred.

Lease Accounting—The Group accounts for operating lease transactions by recording rent expense on a straight-line basis over the expected life of the lease, commencing on the date it gains possession of leased property. The Group includes tenant improvement allowances and rent holidays received from landlords and the effect of any rent escalation clauses as adjustments to straight-line rent expense over the expected life of the lease.

Capital lease transactions are reflected as a liability at the inception of the lease based on the present value of the minimum lease payments or, if lower, the fair value of the property. Assets under capital leases are recorded in Tangible fixed assets, net in the Consolidated Balance Sheets and depreciated in a manner similar to other Tangible fixed assets.

Certain construction projects may be accounted for as direct financing arrangements, whereby the Group records, over the construction period, the full cost of the asset in Tangible fixed assets, net in the Consolidated Balance Sheets. A corresponding liability is also recorded, net of leasehold improvements paid for by the Group, and is amortized over the expected lease term through monthly rental payments using an effective interest method. Assets recorded under direct financing arrangements are depreciated over the lease term.

License Rights—The cost of licenses are either expensed immediately or, if capitalized, are recorded at cost, less accumulated amortization and are amortized using the straight-line method over their estimated useful lives ranging from 3 years to 15 years, with a weighted average useful life of approximately 12 years. We determine amortization periods for licenses based on our assessment of various factors impacting estimated useful lives and cash flows of the acquired rights. Such factors include the expected launch date of the product, the strength of the intellectual property protection of the product and various other competitive, developmental and regulatory issues, and contractual terms. Significant changes to any of these factors may result in a reduction in the useful life of the asset and an acceleration of related amortization expense, which could cause our operating profit, net profit and net profit per share to decrease.

Trade names—Acquired trade names are recorded at fair value upon acquisition and, if deemed to have definite lives, are amortized using the straight-line method over their estimated useful lives of approximately 12 years. We determine amortization periods for trade names based on our assessment of various factors impacting estimated useful lives and cash flows from the acquired assets. Such factors include the strength of the trade name and our plans regarding the future use of the trade name. Significant changes to any of these factors may result in a reduction in the useful life of the asset and an acceleration of related amortization expense, which could cause our operating profit, net profit and net profit per share to decrease.

Developed Technology—Acquired developed technology is recorded at fair value upon acquisition and is amortized using the economic benefit model or the straight-line method, over the estimated useful life ranging from 1 year to 20 years for our intangibles relating to ordinary activities, with a weighted average useful life of approximately 11 years. We determine amortization periods and method of amortization for developed technology based on our assessment of various factors impacting estimated useful lives and timing and extent of estimated cash flows of the acquired assets. Such factors include the strength of the intellectual property protection of the product and various other competitive and regulatory issues, and contractual terms. Significant changes to any of these factors may result in a reduction in the useful life of the asset and an acceleration of related amortization expense, which could cause our operating profit, net profit and net profit per share to decrease. Amortization expense is not recorded on assets held for sale. The value of these assets is subject to continuing scientific, medical and marketplace uncertainty.

Long-Lived Asset Impairment Testing—Long-lived assets, which include tangible fixed assets and definite-lived intangible assets, are assessed for impairment whenever events or changes in circumstances indicate the carrying amount of the asset may not be recoverable. The impairment testing involves comparing the carrying amount of the asset to the forecasted undiscounted future cash flows generated by that asset. In the event the carrying amount of the asset exceeds the undiscounted future cash flows generated by that asset and the carrying amount is not considered recoverable, an impairment exists. An impairment loss is measured as the excess of the asset's carrying amount over its fair value. An impairment loss is recognized in net profit in the period that the impairment occurs.

In-Process Research and Development Assets (IPR&D)—The fair value of IPR&D acquired in a business combination is determined based on the present value of each research project's projected cash flows using an income approach. Future cash flows are predominately based on the net profit forecast of each project, consistent with historical pricing, margins and expense levels of similar products. Turnover is estimated based on relevant market size and growth factors, expected industry trends, individual project life cycles and the life of each research project's underlying patent. In determining the fair value of each research project, expected cash flows are adjusted for the technical and regulatory risk of completion.

IPR&D is initially capitalized and considered indefinite-lived intangible assets subject to annual impairment reviews. The reviews, which occur annually or more frequently upon the occurrence of certain events, requires the determination of the fair value of the respective intangible assets. If the fair value of the intangible assets is less than its carrying amount, an impairment loss is recognized for the difference. For those assets that reach commercialization, the assets are amortized over the expected useful lives.

Goodwill—Goodwill, which represents the excess of purchase price over the fair value of net assets acquired, is carried at cost. Goodwill is not amortized; rather, it is subject to a periodic assessment for impairment by applying a fair value based test. Goodwill is assessed for impairment on an annual basis, as of October 1st of each year or more frequently if events or changes in circumstances indicate that the asset might be impaired. The impairment model requires a two-step method for determining goodwill impairment. In the first step, we determine the fair value of our reporting units using an appropriate valuation methodology. If the net book value of a reporting unit exceeds its fair value, we would then perform the second step of the impairment test which requires allocation of the reporting unit's fair value to all of its assets and liabilities using the acquisition method prescribed under authoritative guidance for business combinations. Any residual fair value is allocated to goodwill. An impairment charge is recognized only when the implied fair value of our reporting unit's goodwill is less than its carrying amount.

Irish company law requires goodwill to be written off over a time period which does not exceed their useful life. Consistent with U.S. GAAP, the Group does not amortize goodwill over an arbitrary period as they are considered to have an indefinite life.

Contingencies—The Group is subject to various patent challenges, product liability claims, government investigations and other legal proceedings in the ordinary course of business. Legal fees and other expenses related to litigation are expensed as incurred and included in Selling, general and administrative expenses or Discontinued operations, net of tax in the Consolidated Profit and Loss Account. Contingent accruals and legal settlements are recorded with a corresponding charge to Litigation-related and other contingencies, net or Discontinued operations, net of tax in the Consolidated Profit and Loss Account when the Group determines that a loss is both probable and reasonably estimable. Due to the fact that legal proceedings and other contingencies are inherently unpredictable, our assessments involve significant judgment regarding future events. The Group records a receivable from its product liability insurance carriers only when the resolution of any dispute has been reached and realization of the potential claim for recovery is considered probable.

Contingent Consideration—Certain of the Group's business acquisitions involve the potential for future payment of consideration that is contingent upon the achievement of operational and commercial milestones and royalty payments on future product sales. The fair value of contingent consideration liabilities is determined at the acquisition date using unobservable inputs. These inputs include the estimated amount and timing of projected cash flows, the probability of success (achievement of the contingent event) and the risk-adjusted discount rate used to present value the probability-weighted cash flows. Subsequent to the acquisition date, at each reporting period, the contingent consideration liability is remeasured at current fair value with changes recorded in earnings. Changes in any of the inputs may result in a significantly different fair value adjustment.

Share Repurchases—The Group accounts for the repurchase of ordinary shares at par value. Under applicable Irish law, ordinary shares repurchased are retired and not displayed separately as treasury stock. Upon retirement of the ordinary shares, the Group records the difference between the weighted average cost of such ordinary shares and the par value of the ordinary shares as an adjustment to Accumulated deficit in the Consolidated Balance Sheets.

Advertising Costs—Advertising costs are expensed as incurred and included in Selling, general and administrative expenses in the Consolidated Profit and Loss Account and amounted to $47.9 million and $57.9 million for the years ended December 31, 2016 and 2015 respectively.

Cost of Sales—Cost of sales includes all costs directly related to bringing both purchased and manufactured products to their final selling destination. It includes purchasing and receiving costs, direct and indirect costs to manufacture products, including direct materials, direct labor, and direct overhead expenses necessary to acquire and convert purchased materials and supplies into finished goods. Cost of sales also includes royalties paid or owed by Endo on certain in-licensed products, inspection costs, depreciation, amortization of intangible assets, warehousing costs, freight charges, costs to operate our equipment, and other shipping and handling activity.

Share-Based Compensation—Share-based compensation for employees and non-employee directors is measured at the grant date based on the estimated fair value of the award and is recognized as an expense over the requisite service period. Share-based compensation expense is reduced for estimated future forfeitures. These estimates are revised in future periods if actual forfeitures differ from the estimates. Changes in forfeiture estimates impact compensation expense in the period in which the change in estimate occurs.

Foreign Currency Translation—The Group's operations utilize the U.S. dollar (USD) or local currency as the functional currency, where applicable. The Group identifies its separate and distinct foreign entities and groups the foreign entities into two categories: 1) extension of the parent (USD functional currency) and 2) self-contained (local functional currency). If a foreign entity does not align with either category, factors are evaluated and a judgment is made to determine the functional currency.

For foreign entities where the USD is the functional currency, all foreign currency-denominated asset and liability amounts are re-measured into USD at end-of-period exchange rates, except for stock, prepaid expenses, tangible fixed assets, goodwill and other intangible assets, which are re-measured at historical rates. Foreign currency income and expenses are re-measured at average exchange rates in effect during the year, except for expenses related to balance sheet amounts re-measured at historical exchange rates. Exchange gains and losses arising from re-measurement of foreign currency-denominated monetary assets and liabilities are included in profit in the period in which they occur.

For foreign entities where the local currency is the functional currency, assets and liabilities denominated in local currencies are translated into USD at end-of-period exchange rates and the resultant translation adjustments are reported, net of their related tax effects, as a component of other reserves in shareholders' funds. Assets and liabilities denominated in other than the local currency are re-measured into the local currency prior to translation into USD and the resultant exchange gains or losses are included in profit in the period in which they occur. Profit and expenses are translated into USD at average exchange rates in effect during the period.

Income Taxes—The Group accounts for income taxes under the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements. Under this method, deferred tax assets and liabilities are determined based on the differences between the financial statements and tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in profit in the period that includes the enactment date. The Group records net deferred tax assets to the extent it believes these assets will more likely than not be realized. In making such a determination, the Group considers all available positive and negative evidence, including projected future taxable profit, tax-planning strategies and results of recent operations. In the event that the Group were to determine that it would be able to realize its deferred tax assets in the future in excess of their net recorded amount, the Group would make an adjustment to the deferred tax asset valuation allowance, which would reduce the provision for income tax.

The Group records uncertain tax positions in accordance with Accounting Standards Codification (ASC) Topic 740, Income Taxes, on the basis of a two-step process whereby the Group first determines whether it is more likely than not that the tax positions will be sustained based on the technical merits of the position and then measures those tax positions that meet the more-likely-than-not recognition threshold. The Group recognizes the largest amount of tax benefit that is greater than 50% likely to be realized upon ultimate settlement with the tax authority. The Group recognizes interest and penalties related to unrecognized tax benefits within the income tax expense line in the accompanying Consolidated Profit and Loss Account. Accrued interest and penalties are included within the related tax liability line in the Consolidated Balance Sheets.

Comprehensive Profit—Comprehensive profit includes all changes in equity during a period except those that resulted from investments by or distributions to a company's shareholders. Other comprehensive profit or loss refers to turnover, expenses, gains and losses that are included in comprehensive profit, but excluded from net profit as these amounts are recorded directly as an adjustment to shareholders' equity.

Recent Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board (FASB) issued Accounting Standards update (ASU) No. 2014-09, *"Revenue from Contracts with Customers"* (ASU 2014-09). ASU 2014-09 represents a comprehensive new turnover recognition model that requires a company to recognize turnover to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which a company expects to be entitled to receive in exchange for those goods or services. This ASU sets forth a new five-step turnover recognition model which replaces the prior turnover recognition guidance in its entirety and is intended to eliminate numerous industry-specific pieces of turnover recognition guidance that have historically existed. In August 2015, the FASB issued ASU No. 2015-14, "*Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date,"* which defers the effective date of ASU 2014-09 by one year, but permits companies to adopt one year earlier if they choose (i.e., the original effective date). As such, ASU 2014-09 will be effective for annual and interim reporting periods beginning after December 15, 2017. In March and April 2016, the FASB issued ASU No. 2016-08 *"Revenue from Contracts with Customers (Topic 606): Principal versus Agent Consideration (Reporting Revenue Gross versus Net)"* and ASU No. 2016-10 *"Revenue from Contracts with Customers (Topic 606): Identifying Performance Obligations and Licensing,"* respectively, which clarifies the guidance on reporting turnover as a principal versus agent, identifying performance obligations and accounting for intellectual property licenses. In addition, in May 2016, the FASB issued ASU No. 2016-12 *"Revenue from Contracts with Customers (Topic 606): Narrow-Scope Improvements and Practical Expedients,"* which amends certain narrow aspects of Topic 606, and in December 2016, the FASB issued ASU No. 2016-20 *"Technical Corrections and Improvements to Topic 606, Revenue from Contracts with Customers,"* which amends certain narrow aspects of Topic 606.

The Group will adopt the new turnover recognition standards on January 1, 2018. The Group has established a cross-functional implementation team consisting of representatives from across its business segments. The Group is currently in the process of performing a diagnostic assessment of the impact of the standard on its contract portfolio by reviewing the Group's current accounting policies and practices to identify potential differences that would result from applying the requirements of the new standard to its turnover contracts. In addition, during 2017 the Group plans to identify and implement, if necessary, appropriate changes to its business processes, systems and controls to support recognition and disclosure under the new standard. The implementation team intends to report the findings and progress of the project to the Group's management and the Audit Committee throughout the remainder of 2017. The Group is currently evaluating the impact of ASU 2014-09 on the Group's consolidated results of operations and financial position. In addition, the two permitted transition methods under the new standard are the full retrospective method, in which case the standard would be applied to each prior reporting period presented and the cumulative effect of applying the standard would be recognized at the earliest period shown, or the modified retrospective method, in which case the cumulative effect of applying the standard would be recognized at the date of initial application. The Group is currently evaluating which transition method it will elect.

In July 2015, the FASB issued ASU No. 2015-11, "*Simplifying the Measurement of Inventory"* (ASU 2015-11). ASU 2015-11 states that an entity should measure stock at the lower of cost or net realizable value. Net realizable value is the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. For public entities, ASU 2015-11 is effective for fiscal years beginning after December 15, 2016, including interim periods within those fiscal years. The amendments in this update should be applied prospectively and early application is permitted. The Group does not expect the adoption of ASU 2015-11 to impact the Group's consolidated results of operations and financial position.

In February 2016, the FASB issued ASU No. 2016-02, "*Leases (Topic 842)*" (ASU 2016-02). ASU 2016-02 establishes the principles to report transparent and economically neutral information about the assets and liabilities that arise from leases. This guidance results in a more faithful representation of the rights and obligations arising from operating and capital leases by requiring lessees to recognize the lease assets and lease liabilities that arise from leases in the statement of financial position and to disclose qualitative and quantitative information about lease transactions, such as information about variable lease payments and options to renew and terminate leases. ASU 2016-02 is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. The Group is currently evaluating the impact of ASU 2016-02 on the Group's consolidated results of operations and financial position.

In March 2016, the FASB issued ASU No. 2016-09 *"Improvements to Employee Share-Based Payment Accounting"* (ASU 2016-09). ASU 2016-09 changes how companies account for certain aspects of share-based payments to employees including: (a) requiring all income tax effects of awards to be recognized in the profit and loss account, rather than in additional paid in capital, when the awards vest or are settled, (b) eliminating the requirement that excess tax benefits be realized before companies can recognize them, (c) requiring companies to present excess tax benefits as an operating activity on the statement of cash flows rather than as a financing activity, (d) increasing the amount an employer can withhold to cover income taxes on awards and still qualify for the exception to liability classification for shares used to satisfy the employer's statutory income tax withholding obligation, (e) requiring an employer to classify the cash paid to a tax authority when shares are withheld to satisfy its statutory income tax withholding obligation as a financing activity on its statement of cash flows and (f) electing whether to account for forfeitures of share-based payments by (1) recognizing forfeitures of awards as they occur or (2) estimating the number of awards expected to be forfeited and adjusting the estimate when it is likely to change, as is currently required. ASU 2016-09 is effective for fiscal years beginning after December 15, 2016, and interim periods within those fiscal years. The Group will adopt the new guidance on a prospective basis on January 1, 2017. The Group expects the primary impact of adoption to be the recognition of excess tax benefits and deficiencies within income taxes on ordinary activities rather than within additional paid-in capital. If we had adopted the updated guidance in 2016, our income tax benefit would have decreased by $0.7 million, our effective tax rate would have decreased by a negligible amount and our diluted earnings per share attributable to Endo International plc shareholders in 2016 would not have changed. In addition, upon adoption the Group will retrospectively adopt the provision of this guidance related to changes to the statement of cash flows in any of the periods presented. The table below presents the effect on the Group's consolidated statement of cash flows for each of the years ended December 31, 2016 and 2015. These amounts are not necessarily indicative of amounts that the Group will recognize in future years related to the excess income tax benefits or deficiencies nor the cash paid for withholding taxes.

Year ended December 31, (in millions):	As Reported	Effect of Adoption	Upon Adoption
2016:			
Net cash provided by operating activities	$ 524,439	$ 3,204	$ 527,643
Net cash (used in) financing activities	$ (393,982)	$ (3,204)	$ (397,186)
2015:			
Net cash provided by (used in) operating activities	$ 62,026	$ 21,979	$ 84,005
Net cash provided by financing activities	$ 6,055,467	$ (21,979)	$ 6,033,488

The Group expects to continue estimating forfeitures to determine the amount of compensation cost to be recognized in each period. None of the other provisions in this amended guidance are expected to have a significant impact on the Group's consolidated financial statements.

In August 2016, the FASB issued ASU No. 2016-15 "Classification of Certain Cash Receipts and Cash Payments" (ASU 2016-15). ASU 2016-15 addresses eight specific cash flow issues with the objective of reducing diversity in how certain cash receipts and cash payments are presented and classified in the statement of cash flows. ASU 2016-15 is effective for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. Early adoption is permitted in any interim or annual period but all of ASU 2016-15 must be adopted in the same period. The Group is currently evaluating the impact of ASU 2016-15 on the Group's consolidated statement of cash flows.

In October 2016, the FASB issued ASU No. 2016-16 "*Intra-Entity Transfers of Assets Other Than Inventory*" (ASU 2016-16). ASU 2016-16 states that an entity should recognize the income tax consequences when an intra-entity transfer of an asset other than stock occurs. ASU 2016-16 is effective for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. Early adoption is permitted as long as it is adopted in the first interim period of a fiscal year beginning after December 15, 2016. During the year ended December 31, 2016, the Group completed a legal entity restructuring as part of its continuing integration of its acquired businesses that was accounted for as an intra-entity transfer of assets. As a result, the Group recorded a current deferred charge of $34.3 million and a non-current deferred charge of $348.8 million in the Consolidated Balance Sheet at December 31, 2016 within Prepaid expenses and other current assets and Other assets, respectively. The impact of adopting the accounting guidance would be the elimination of approximately $25 million of the current deferred charge and all of the non-current deferred charge as an adjustment to retained earnings. Additionally, upon adoption, the Group would record additional net long-term deferred tax assets offset by a corresponding valuation allowance.

In November 2016, the FASB issued ASU No. 2016-18 "*Statement of Cash Flows (Topic 230) - Restricted Cash*" (ASU 2016-18). ASU 2016-18 states that a statement of cash flows should explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. Therefore, amounts generally described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. ASU 2016-18 is effective for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. Early adoption is permitted, including adoption in an interim period, and all updates should be applied using a retrospective transition method. The Group is currently evaluating the impact of ASU 2016-18 on the Group's consolidated statement of cash flows.

In January 2017, the FASB issued ASU No. 2017-01 *"Business Combinations (Topic 805) - Clarifying the Definition of a Business"* (ASU 2017-01). ASU 2017-01 clarifies the definition of a business with the objective of adding guidance to assist entities with evaluating whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. The amendments in this update provide a screen to determine when an integrated set of assets and activities (collectively referred to as a "set"), is not a business. The screen requires that when substantially all of the fair value of the gross assets acquired (or disposed of) is concentrated in a single identifiable asset or a group of similar identifiable assets, the set is not a business. This screen reduces the number of transactions that need to be further evaluated. ASU 2017-01 is effective for annual periods beginning after December 15, 2017, including interim periods within those periods. The amendments in this update should be applied prospectively on or after the effective date. Early application of the amendments in this update is allowed as follows: 1) for transactions for which the acquisition date occurs before the issuance date or effective date of the amendments, only when the transaction has not been reported in financial statements that have been issued or made available for issuance; 2) for transactions in which a subsidiary is deconsolidated or a group of assets is derecognized that occur before the issuance date or effective date of the amendments, only when the transaction has not been reported in financial statements that have been issued or made available for issuance. The Group plans to early adopt this new standard as of January 1, 2017 and expects that ASU 2017-01 will result in fewer Group transactions meeting the definition of a business.

In January 2017, the FASB issued ASU No. 2017-04 *"Intangibles - Goodwill and Other (Topic 350): Simplifying the Accounting for Goodwill Impairment"* (ASU 2017-04). ASU 2017-04 simplifies the subsequent measurement of goodwill by eliminating Step 2 from the goodwill impairment test. In computing the implied fair value of goodwill under Step 2, an entity had to perform procedures to determine the fair value at the impairment testing date of its assets and liabilities (including unrecognized assets and liabilities) following the procedure that would be required in determining the fair value of assets acquired and liabilities assumed in a business combination. Instead, under ASU 2017-04, an entity should perform its annual or interim goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount. An entity should recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value; however, the loss recognized should not exceed the total amount of goodwill allocated to that reporting unit. Additionally, an entity should consider income tax effects from any tax deductible goodwill on the carrying amount of the reporting unit when measuring the goodwill impairment loss, if applicable. ASU 2017-04 is effective for annual or any interim goodwill impairment tests in fiscal years beginning after December 15, 2019 and an entity should apply the amendments of ASU 2017-04 on a prospective basis. Early adoption is permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. The Group plans to adopt this standard as of January 1, 2017 and will eliminate Step 2 from its goodwill tests.

NOTE 3. DISCONTINUED OPERATIONS AND HELD FOR SALE

American Medical Systems

On February 24, 2015, the Group's Board of Directors (Board of Directors) approved a plan to sell the Group's American Medical Systems Holdings, Inc. (AMS) business, which comprised the entirety of our former Devices segment. The AMS business was comprised of the Men's Health and Prostate Health business as well as the Women's Health business (referred to herein as Astora). On August 3, 2015, the Group sold the Men's Health and Prostate Health business to Boston Scientific Corporation (Boston Scientific) for $1.65 billion, with $1.60 billion paid upfront in cash and $50.0 million in cash contingent on Boston Scientific achieving certain product turnover milestones in the Men's Health and Prostate Health business in 2016. The milestones related to the $50.0 million contingent payment were not achieved. In addition, Boston Scientific paid $60.0 million in exchange for 60,000 shares of AMS Series B Non-Voting Preferred Stock (the Series B Senior Preferred Stock) sold by our subsidiary Endo Pharmaceuticals Inc. (EPI). On December 11, 2015, the Group repurchased the Series B Senior Preferred Stock from Boston Scientific Corporation for $61.6 million.

In addition to selling the Men's Health and Prostate Health business in 2015, as of December 31, 2015 and continuing into 2016, the Group was actively pursuing a sale of Astora with the Group in active negotiations with multiple potential buyers. The majority of the remaining assets and liabilities of the AMS business, which were related to Astora, were classified as held for sale in the Consolidated Balance Sheet as of December 31, 2015 in the Group's Form 10-K filed with the Securities and Exchange Commission (SEC) on February 29, 2016. Certain of AMS's assets and liabilities, primarily with respect to its product liability accrual related to vaginal mesh cases, the related QSFs and certain intangible and fixed assets, were not classified as held for sale based on management's expectation that these assets and liabilities would remain with the Group.

On February 24, 2016, the Board of Directors resolved to wind-down Astora as it did not align with the Group's strategic direction and to reduce Astora's exposure to mesh-related product liability. Astora conducted a wind-down process to transition physicians to alternative products during the first quarter of 2016. Astora ceased business operations on March 31, 2016. As a result, as of March 31, 2016 and periods thereafter, the remaining assets and liabilities of the AMS business, which were related to the Astora business, were no longer classified as held for sale in the Consolidated Balance Sheets. In accordance with applicable accounting guidance, the Group also reclassified the Astora assets and liabilities previously presented as held for sale as of December 31, 2015 to held and used on its Consolidated Balance Sheets.

The operating results of the AMS business are reported as Discontinued operations, net of tax in the Consolidated Profit and Loss Account for all periods presented.

In connection with classifying AMS as held for sale during 2015, the Group was required to compare the estimated fair values of the underlying disposal groups, less the costs to sell, to the respective carrying amounts. As a result of this analysis, the Group recorded a combined asset impairment charge of $222.8 million during the three months ended March 31, 2015, which was classified as Discontinued operations, net of tax in the Consolidated Profit and Loss Account. We estimated the fair value of the Men's Health and Prostate Health division based on the agreed-upon purchase price with Boston Scientific. The fair value of Astora was estimated based on contemporaneous expressions of interest from third parties. Subsequently, at the time of the sale of the Men's Health and Prostate Health component in August 2015, the Group recorded a gain based on the difference between the net proceeds received and the net book value of the assets sold of approximately $13.6 million, which included an adjustment of $25.7 million relating to amounts transferred from foreign currency translation adjustments and included in the determination of net profit for the period as a result of the sale, which decreased the gain. This amount is included in Discontinued operations, net of tax in the Consolidated Profit and Loss Account for the year ended December 31, 2015.

During the three months ended September 30, 2015 and December 31, 2015, the Group compared the estimated fair value of Astora, less the costs to sell, to its respective carrying amount. As a result of these analyses, the Group recorded total additional asset impairment charges of $7.9 million for the year ended December 31, 2015, which were classified as Discontinued operations, net of tax in the Consolidated Profit and Loss Account.

In addition, as a result of determining that the sale of the AMS disposal groups was probable as of December 31, 2015, the Group re-assessed its permanent reinvestment assertion for certain components of the AMS business and recognized a corresponding tax benefit of $161.8 million during the year ended December 31, 2015, which was recorded as Income tax benefit (a component of (loss) profit on ordinary activities) in the Consolidated Profit and Loss Account. In addition, due to the overall differences between the book and tax basis of the underlying assets sold during the third quarter of 2015, the Group recognized a tax benefit of $157.4 million during the year ended December 31, 2015, from Discontinued operations.

As a result of the Astora wind-down initiative announced in the first quarter of 2016, the Group incurred asset impairment charges of $21.3 million during the year ended December 31, 2016. See below for discussion of our material wind-down initiatives.

The following table provides the operating results of AMS Discontinued operations, net of tax for the years ended December 31 (in thousands):

	2016	2015
Turnover	$ 30,101	$ 305,256
Litigation related and other contingencies, net	$ 20,115	$ 1,107,752
Asset impairment charges	$ 21,328	$ 230,703
Gain on sale of business	$ —	$ 13,550
Loss from discontinued operations before income taxes	$ (123,164)	$ (1,352,344)
Income tax benefit	$ —	$ (157,418)
Discontinued operations, net of tax	$ (123,164)	$ (1,194,926)

The following table provides the Depreciation and amortization and Purchases of tangible fixed assets of AMS for the years ended December 31 (in thousands):

	2016	2015
Cash flows from discontinued operating activities:		
Net loss	$ (123,164)	$ (1,194,926)
Depreciation and amortization	$ —	$ 11,555
Net cash used in discontinued investing activities:		
Purchases of tangible fixed assets	$ (138)	$ (2,709)

Astora Restructuring

The Astora wind-down process includes a restructuring initiative implemented during the three months ended March 31, 2016, which includes the reduction of the Astora workforce consisting of approximately 250 employees. Under this restructuring initiative, separation costs are expensed over the requisite service period, if any, while retention is being expensed ratably over the respective retention period.

As a result of the Astora restructuring initiative, the Group incurred expenses of $60.9 million during the year ended December 31, 2016 consisting of employee separation and other benefit-related costs, asset impairment charges, contract termination charges and other general restructuring costs. There were no restructuring expenses related to this initiative during the year ended December 31, 2015. The Group anticipates there will be no significant additional pre-tax restructuring expenses related to employee separation and other benefit-related costs, contract termination charges and other restructuring costs. The majority of these actions were completed as of September 30, 2016 and substantially all cash payments will be made by June 30, 2017. These restructuring costs are included in Discontinued operations in the Consolidated Profit and Loss Account.

A summary of expenses related to the Astora restructuring initiative is included below for the year ended December 31, 2016 (in thousands):

	2016
Employee separation, retention and other benefit-related costs	$ 20,476
Asset impairment charges	21,328
Contract termination charges	8,074
Other wind down costs	10,972
Total	$ 60,850

The liability related to the Astora restructuring initiative totaled $5.5 million as of December 31, 2016 and is included in Accounts payable and accrued expenses in the Consolidated Balance Sheets. Changes to this accrual during the year ended December 31, 2016 were as follows (in thousands):

	Employee Separation, Retention and Other Benefit-Related Costs	Contract Termination Charges	Other Restructuring Costs	Total
Liability balance as of January 1, 2016	$ —	$ —	$ —	$ —
Expenses	20,476	8,074	5,798	34,348
Cash distributions	(16,621)	(6,413)	(5,798)	(28,832)
Liability balance as of December 31, 2016	$ 3,855	$ 1,661	$ —	$ 5,516

Litha

During the fourth quarter of 2016, the Group initiated a process to sell its Litha Healthcare Group Limited and related Sub-Sahara African business assets (Litha) and on February 27, 2017, the Group entered into a definitive agreement to sell Litha to Acino Pharma AG for up to $100 million in cash. See Note 29. Subsequent Events for further discussion. The assets and liabilities of Litha are classified as held for sale in the Consolidated Balance Sheet as of December 31, 2016.

The following table provides the components of Assets and Liabilities held for sale of Litha as of December 31, 2016 (in thousands):

	December 31, 2016
Current assets	$ 50,167
Tangible fixed assets	3,527
Other intangibles, net	29,950
Other assets	11,343
Assets held for sale	$ 94,987
Current liabilities	$ 18,642
Deferred taxes	—
Other liabilities	5,696
Liabilities held for sale	$ 24,338

Given that the sale of Litha does not represent a strategic shift in the Group's business, the Group has not classified the operations of this business as discontinued.

Ordinary Activities, Discontinued Operations, and Assets and Liabilities Held for Sale

The Group is presenting a bridge of the ordinary activities financial statements presented with the financial statements of the group. Treatment of assets and liabilities held for sale and discontinued operations presented are in accordance with U.S. GAAP.

The following profit and loss accounts show reconciliations of ordinary activities and discontinued operations to the global company for the years ended December 31, 2016 and 2015 (in thousands):

	Year Ended December 31, 2016		
	Ordinary Activities	Discontinued Operations	Global Company
TURNOVER	$ 4,010,274	$ 30,101	$ 4,040,375
Cost of sales	2,634,973	14,943	2,649,916
GROSS PROFIT	$ 1,375,301	$ 15,158	$ 1,390,459
Selling, general and administrative expenses	770,728	101,189	871,917
Research and development expenses	183,372	—	183,372
Litigation-related and other contingency expenses	23,950	20,270	44,220
Asset impairment charges	3,781,165	21,328	3,802,493
Acquisition-related and integration items	87,601	—	87,601
OPERATING LOSS	$ (3,471,515)	$ (127,629)	$ (3,599,144)
INTEREST EXPENSE, NET	452,679	—	452,679
OTHER EXPENSE (INCOME), NET	(338)	(4,351)	(4,689)
LOSS ON ORDINARY ACTIVITIES BEFORE TAXATION	$ (3,923,856)	$ (123,278)	$ (4,047,134)
TAX ON LOSS ON ORDINARY ACTIVITIES	(700,084)	—	(700,084)
LOSS ON ORDINARY ACTIVITIES	$ (3,223,772)	$ (123,278)	$ (3,347,050)
DISCONTINUED OPERATIONS, NET OF TAX	(123,278)	123,278	—
LOSS FOR THE FINANCIAL YEAR	$ (3,347,050)	$ —	$ (3,347,050)
Less: Net loss attributable to minority interests	16	—	16
LOSS FOR THE FINANCIAL YEAR ATTRIBUTABLE TO ENDO INTERNATIONAL PLC	$ (3,347,066)	$ —	$ (3,347,066)

	Year Ended December 31, 2015		
	Ordinary Activities	Discontinued Operations	Global Company
TURNOVER	$ 3,268,718	$ 305,256	$ 3,573,974
Cost of sales	2,075,651	85,125	2,160,776
GROSS PROFIT	$ 1,193,067	$ 220,131	$ 1,413,198
Selling, general and administrative expenses	741,304	198,067	939,371
Research and development expenses	102,197	30,652	132,849
Litigation-related and other contingency expenses	37,082	1,107,752	1,144,834
Asset impairment charges	1,140,709	230,703	1,371,412
Acquisition-related and integration items	105,250	16,994	122,244
OPERATING PROFIT (LOSS)	$ (933,475)	$ (1,364,037)	$ (2,297,512)
INTEREST EXPENSE, NET	373,214	—	373,214
LOSS ON EXTINGUISHMENT OF DEBT	67,484	—	67,484
OTHER INCOME, NET	63,691	(11,693)	51,998
PROFIT (LOSS) ON ORDINARY ACTIVITIES BEFORE TAXATION	$ (1,437,864)	$ (1,352,344)	$ (2,790,208)
TAX ON PROFIT (LOSS) ON ORDINARY ACTIVITIES	(1,137,465)	(157,418)	(1,294,883)
PROFIT (LOSS) ON ORDINARY ACTIVITIES	$ (300,399)	$ (1,194,926)	$ (1,495,325)
DISCONTINUED OPERATIONS, NET OF TAX	(1,194,926)	1,194,926	—
LOSS FOR THE FINANCIAL YEAR	$ (1,495,325)	$ —	$ (1,495,325)
Less: Net profit attributable to minority interests	(283)	—	(283)
LOSS FOR THE FINANCIAL YEAR ATTRIBUTABLE TO ENDO INTERNATIONAL PLC	$ (1,495,042)	$ —	$ (1,495,042)

The following balance sheets show reconciliations of held and used assets and liabilities to held for sale assets and liabilities to the global company as of December 31, 2016 and 2015 (in thousands):

	December 31, 2016		
	Held and Used	Held for Sale	Global Company
ASSETS			
Fixed Assets			
Intangible assets-Goodwill	$ 4,729,395	$ —	$ 4,729,395
Intangible assets-Other	5,859,297	34,571	5,893,868
Tangible assets	669,596	14,133	683,729
Current Assets			
Stock	555,671	22,185	577,856
Debtors	1,117,479	23,009	1,140,488
Cash at bank and in-hand	799,324	11,744	811,068
Assets held for sale	116,985	(116,985)	—
Long-Term Assets			
Investments	2,267	—	2,267
Other	425,095	11,343	436,438
TOTAL ASSETS	$ 14,275,109	$ —	$ 14,275,109
EQUITY AND LIABILITIES			
Capital and Reserves			
Called up share capital presented as equity	$ 64	—	$ 64
Share premium account	6,140,580	—	6,140,580
Other reserves	(9,803,602)	—	(9,803,602)
Profit and loss account	6,364,547	—	6,364,547
Total equity shareholders' funds	$ 2,701,589	—	$ 2,701,589
Minority interest	—	—	—
	$ 2,701,589	—	$ 2,701,589
Provision for liabilities			
Taxation including deferred taxation	$ 201,563	$ (864)	$ 200,699
Other provisions for liabilities	605,100	5,696	610,796
Total for provisions	$ 806,663	$ 4,832	$ 811,495
Creditors			
Debenture loans	$ 8,272,503	$ —	$ 8,272,503
Trade and other creditors	2,470,016	19,506	2,489,522
Liabilities related to assets held for sale	24,338	(24,338)	—
Total for creditors	$ 10,766,857	$ (4,832)	$ 10,762,025
TOTAL EQUITY AND LIABILITIES	$ 14,275,109	$ —	$ 14,275,109

	December 31, 2015		
	Held and Used	Held for Sale	Global Company
ASSETS			
Fixed Assets			
Intangible assets-Goodwill	$ 7,299,354	$ 1,452	$ 7,300,806
Intangible assets-Other	7,828,942	755	7,829,697
Tangible assets	675,624	335	675,959
Current Assets			
Stock	752,493	3,528	756,021
Debtors	1,805,761	4,654	1,810,415
Investments	34	—	34
Cash at bank and in-hand	857,727	2,060	859,787
Assets held for sale	36,522	(36,522)	—
Long-Term Assets			
Investments	3,855	—	3,855
Other	90,024	23,738	113,762
TOTAL ASSETS	$ 19,350,336	$ —	$ 19,350,336
EQUITY AND LIABILITIES			
Capital and Reserves			
Called up share capital presented as equity	$ 65	$ —	$ 65
Share premium account	6,133,515	—	6,133,515
Other reserves	(9,877,163)	—	(9,877,163)
Profit and loss account	9,711,613	—	9,711,613
Total equity shareholders' funds	$ 5,968,030	$ —	$ 5,968,030
Minority interest	(54)	—	(54)
	$ 5,967,976	$ —	$ 5,967,976
Provision for liabilities			
Taxation including deferred taxation	$ 879,591	$ 203	$ 879,794
Other provisions for liabilities	236,253	—	236,253
Total for provisions	$ 1,115,844	$ 203	$ 1,116,047
Creditors			
Debenture loans	$ 8,580,362	$ 14,135	$ 8,594,497
Trade and other creditors	3,665,939	5,877	3,671,816
Liabilities related to assets held for sale	20,215	(20,215)	—
Total for creditors	$ 12,266,516	$ (203)	$ 12,266,313
TOTAL EQUITY AND LIABILITIES	$ 19,350,336	$ —	$ 19,350,336

NOTE 4. RESTRUCTURING

U.S. Generic Pharmaceuticals Restructuring

2015 U.S Generic Pharmaceuticals Restructuring

In connection with the acquisition of Par Pharmaceutical Holdings, Inc. and its subsidiaries (together herein Par) on September 25, 2015, we implemented cost-rationalization and integration initiatives to capture operating synergies and generate cost savings across the Group. These measures included realigning the Group's U.S. Generic Pharmaceuticals segment sales, sales support, management activities and staffing, which resulted in separation benefits to certain U.S. Generic Pharmaceuticals employees. The cost reduction initiatives included a reduction in headcount of approximately 6% of the U.S. Generic Pharmaceuticals workforces. Under this restructuring initiative (the 2015 U.S. Generic Pharmaceuticals restructuring initiative), separation costs are expensed over the requisite service period, if any, while retention is expensed ratably over the respective retention period.

As a result of the 2015 U.S. Generic Pharmaceuticals restructuring initiative, the Group incurred restructuring expenses of $5.0 million and $23.6 million during the years ended December 31, 2016 and 2015, respectively, consisting of employee separation and other benefit-related costs. The Group does not anticipate any further restructuring expenses related to employee separation and other benefit-related costs. These actions were completed by October 31, 2016. In addition, the Group anticipates there will be additional restructuring expenses of approximately $2.5 million related to accelerated depreciation on certain assets. These restructuring costs are allocated to the U.S. Generic Pharmaceuticals segment, and are primarily included in Selling, general and administrative expenses in the Consolidated Profit and Loss Account.

The liability related to the 2015 U.S. Generic Pharmaceuticals restructuring initiative totaled $3.3 million and $17.9 million at December 31, 2016 and 2015, respectively. At December 31, 2016 and 2015, this liability is included in Accounts payable and accrued expenses in the Consolidated Balance Sheets. Changes to this accrual during the years ended December 31, 2016 and 2015 were as follows (in thousands):

	Total
Liability balance as of January 1, 2015	$ —
Expenses	23,591
Cash distributions	(5,677)
Liability balance as of January 1, 2016	$ 17,914
Expenses	5,010
Cash distributions	(19,655)
Liability balance as of December 31, 2016	$ 3,269

2016 U.S Generic Pharmaceuticals Restructuring

As part of the ongoing U.S. Generic Pharmaceuticals integration efforts, in May 2016 we announced a restructuring initiative to optimize our product portfolio and rationalize our manufacturing sites to expand product margins (the 2016 U.S. Generic Pharmaceuticals restructuring initiative). These measures include certain cost savings initiatives, including a reduction in headcount and the disposal of our Charlotte, North Carolina manufacturing facility (the Charlotte facility). On October 31, 2016, we entered into a definitive agreement to sell the Charlotte facility for proceeds of $14 million. The Group recorded an impairment charge of $6.9 million during the fourth quarter of 2016 related to fixed assets associated with the sale. The transaction closed in January 2017 and the assets and liabilities of the Charlotte facility were classified as held for sale in the accompanying Consolidated Balance Sheet as of December 31, 2016.

As a result of the 2016 U.S. Generic Pharmaceuticals restructuring initiative, the Group has incurred total restructuring expenses of $173.9 million through December 31, 2016 and expects to incur additional restructuring-related expenses of approximately $1.0 million consisting of accelerated depreciation, employee separation and other benefit-related costs and certain other charges. The Group anticipates these actions will be completed by September 2017, with substantially all cash payments made by the end of 2017. Under this restructuring initiative, separation costs are expensed ratably over the requisite service period, as applicable.

Restructuring charges of $173.9 million recorded during the year ended December 31, 2016, consisted of certain intangible asset impairment charges of $107.2 million, charges to increase excess stock reserves of $33.3 million, charges relating to employee separation and other benefit-related costs of $17.0 million, accelerated depreciation of $10.2 million and other charges of $6.2 million. These charges are included in the U.S. Generic Pharmaceuticals segment and are included in Asset impairment charges, Cost of sales, and Selling, general and administrative expenses in the Consolidated Profit and Loss Account.

The liability related to the 2016 U.S. Generic Pharmaceuticals restructuring initiative totaled $9.9 million at December 31, 2016 and is included in Accounts payable and accrued expenses in the Consolidated Balance Sheets. Changes to the accrual during the year ended December 31, 2016 were as follows (in thousands):

	Total
Liability balance as of January 1, 2016	$ —
Expenses	16,983
Cash distributions	(7,044)
Liability balance as of December 31, 2016	$ 9,939

2016 U.S. Branded Pharmaceutical Restructuring

In December 2016, the Group announced that it was terminating its worldwide license and development agreement with BioDelivery Sciences International, Inc. (BDSI) for BELBUCA™ and returning the product to BDSI. This transaction closed on January 6, 2017. As a result of this announcement and a comprehensive assessment of its product portfolio, the Group restructured its U.S. Branded Pharmaceuticals segment sales organization during the fourth quarter of 2016 (the 2016 U.S. Branded restructuring initiative). This restructuring was comprised of certain cost savings initiatives, including the elimination of an approximate 375-member U.S. Branded pain field sales force and the termination of certain contracts. The Group's legacy pain portfolio products will be managed as mature brands going forward.

As a result of the 2016 U.S. Branded restructuring initiative, the Group incurred total pre-tax charges of approximately $61.5 million during the fourth quarter of 2016. These charges consisted of a non-cash intangible asset impairment charge of approximately $36.8 million, employee separation and other benefit-related costs of $16.5 million, early contract termination fees of $5.2 million, and $3.0 million of stock write-offs. These actions were completed by December 31, 2016 and substantially all of the cash payments are anticipated to be made by the end of 2017. These charges are included in the U.S. Branded Pharmaceuticals segment and are included in Asset impairment charges, Cost of sales, and Selling, general and administrative expenses in the Consolidated Profit and Loss Account. The Group does not anticipate there will be additional material pre-tax restructuring expenses related to this initiative.

The liability related to the 2016 U.S. Branded Pharmaceutical restructuring initiative totaled $21.8 million at December 31, 2016 and is included in Accounts payable and accrued expenses in the Consolidated Balance Sheets. Changes to the accrual during the year ended December 31, 2016 were as follows (in thousands):

	Employee Separation and Other Benefit-Related Costs	Contract Termination Charges	Total
Liability balance as of January 1, 2016	$ —	$ —	$ —
Expenses	16,544	5,224	21,768
Cash distributions	—	—	—
Liability balance as of December 31, 2016	$ 16,544	$ 5,224	$ 21,768

Auxilium Restructuring

In connection with the acquisition of Auxilium Pharmaceuticals, Inc. (subsequently converted to Auxilium Pharmaceuticals LLC hereafter referred to as Auxilium) on January 29, 2015, the Group implemented cost-rationalization and integration initiatives to capture operating synergies and generate cost savings across the Group (the Auxilium restructuring initiative). These measures included realigning our sales, sales support, management activities and staffing, which included separation benefits to former Auxilium employees, in addition to the closing of duplicative facilities. The cost reduction initiatives included a reduction in headcount of approximately 40% of the former Auxilium workforce. For former Auxilium employees that agreed to continue employment with the Group for a merger transition period, the separation costs payable upon completion of their retention period were expensed over their respective retention period.

As a result of the Auxilium restructuring initiative, the Group incurred restructuring expenses of $41.9 million during the year ended December 31, 2015, consisting of $26.7 million of employee severance and other benefit-related costs. The expenses were also attributable to certain charges related to our Auxilium subsidiary's former corporate headquarters in Chesterbrook, Pennsylvania, including $7.0 million of asset impairment charges on certain related leasehold improvements during the first quarter of 2015, and $7.9 million recorded upon the facility's cease use date, representing the liability for our remaining obligations under the respective lease agreement, net of estimated sublease income, during the first quarter of 2015. These restructuring costs are included in the U.S. Branded Pharmaceuticals segment, and are primarily included in Selling, general and administrative costs and expenses in the Consolidated Profit and Loss Account. There were no expenses associated with this restructuring for the year ended December 31, 2016 and the Group does not anticipate any additional pre-tax restructuring expenses. A summary of expenses related to the Auxilium restructuring initiatives is included below for the year ended December 31, 2015 (in thousands):

	December 31, 2015
Employee Separation and Other Benefit-Related Costs	$ 26,696
Asset Impairment Charges	7,000
Other Restructuring Costs	8,215
Total	$ 41,911

Substantially all employee separation and other benefit-related costs cash payments relating to this initiative were made by the end of 2016 and the remainder of the cash payments will be made over the remaining lease term of Auxilium's former corporate headquarters in Chesterbrook, Pennsylvania.

The liability related to the Auxilium restructuring initiative totaled $5.5 million and $12.3 million at December 31, 2016 and 2015, respectively, and is included in Accounts payable and accrued expenses and Other liabilities in the Consolidated Balance Sheets. Changes to this accrual during the year ended December 31, 2016 were as follows (in thousands):

	Employee Separation and Other Benefit-Related Costs	Other Restructuring Costs	Total
Liability balance as of January 1, 2015	$ —	$ —	$ —
Expenses	26,696	8,215	34,911
Cash distributions	(21,343)	(1,305)	(22,648)
Liability balance as of January 1, 2016	$ 5,353	$ 6,910	$ 12,263
Cash distributions	(5,353)	(1,406)	(6,759)
Liability balance as of December 31, 2016	$ —	$ 5,504	$ 5,504

January 2017 Restructuring

On January 26, 2017, the Group announced a restructuring initiative implemented as part of its ongoing organizational review (the January 2017 restructuring initiative). This restructuring is intended to further integrate, streamline and optimize the Group's operations by aligning certain corporate and R&D functions with its recently restructured U.S. Generics Pharmaceutical and U.S. Branded Pharmaceutical business units in order to create efficiencies and cost savings.

As part of this restructuring, the Group will undertake certain cost reduction initiatives, including a reduction of approximately 90 positions of its workforce, primarily related to corporate and U.S. Branded Pharmaceutical R&D functions in Malvern, PA and Chestnut Ridge, NY, a streamlining of general and administrative expenses, an optimization of commercial spend and a refocusing of research and development efforts. The Group expects to incur cash charges of approximately $15 million to $20 million of employee separation and other benefit-related costs in connection with the January 2017 restructuring initiative. Substantially all of these cash payments are anticipated to be made by the end of 2017 and the Group anticipates that substantially all of the actions associated with this restructuring will be completed by the end of April 2017. Under this restructuring, separation costs are expensed over the requisite service period, if any, while retention costs are expensed ratably over the respective retention period. There were no expenses recorded for the year ended December 31, 2016 related to the January 2017 restructuring initiative.

NOTE 5. ACQUISITIONS

For each of the acquisitions described below, the estimated fair values of the net assets acquired have been finalized and all measurement period adjustments were complete as of December 31, 2016.

Acquisition of Remaining Shares of Litha

In February 2015, the Group acquired substantially all of Litha's remaining outstanding ordinary share capital that it did not own for consideration of approximately $40 million. At December 31, 2014, the Group owned 70.3% of the issued ordinary share capital of Litha. In connection with this transaction, the Group had deposited cash into an escrow account, primarily for the purpose of guaranteeing amounts required to be paid to Litha's security holders in connection with this acquisition, which was released from escrow at the time of acquisition. As of December 31, 2016, the assets and liabilities of the Litha business are classified as held for sale as further discussed in Note 3. Discontinued Operations and Held for Sale.

Auxilium Pharmaceuticals, Inc.

On January 29, 2015 (the Auxilium Acquisition Date), the Group acquired all of the outstanding shares of common stock of Auxilium, a fully integrated specialty biopharmaceutical company in the men's healthcare sector with a strategically focused product portfolio and pipeline in orthopedics, dermatology and other therapeutic areas, in a cash and stock transaction valued at $2.6 billion.

The operating results of Auxilium are included in the accompanying Consolidated Profit and Loss Account for the year ended December 31, 2016 and the operating results from the acquisition date of January 29, 2015 are included in the accompanying Consolidated Profit and Loss Account for the year ended December 31, 2015. The Consolidated Balance Sheets as of December 31, 2016 and 2015 reflect the acquisition of Auxilium. Our measurement period adjustments for Auxilium were complete as of December 31, 2015.

The Group recognized no acquisition-related transaction costs associated with the Auxilium acquisition during the year ended December 31, 2016. The Group recognized acquisition-related transaction costs associated with the Auxilium acquisition during the year ended December 31, 2015 totaling $23.1 million. These costs, which related primarily to bank fees, legal and accounting services, and fees for other professional services, are included in Acquisition-related and integration items in the accompanying Consolidated Profit and Loss Account.

The amounts of Auxilium Turnover and Net loss included in the Group's Consolidated Profit and Loss Account from and including January 29, 2015 to December 31, 2015 are as follows (in thousands, except per share data):

Turnover	$	341,520
Net loss attributable to Endo International plc (1)	$	(469,986)
Basic and diluted net loss per share	$	(2.38)

(1) Net loss attributable to Endo International plc does not include any portion of the goodwill impairment charges recorded during 2015 since it is not possible to distinguish the amount of the charges directly attributable to Auxilium.

The following supplemental unaudited pro forma information presents the financial results as if the acquisition of Auxilium had occurred on January 1, 2015 for the year ended December 31, 2015. This supplemental pro forma information has been prepared for comparative purposes and does not purport to be indicative of what would have occurred had the acquisition been made on January 1, 2015, nor are they indicative of any future results.

		Year Ended December 31, 2015
Unaudited pro forma consolidated results (in thousands, except per share data):		
Turnover	$	3,292,293
Net loss attributable to Endo International plc	$	(1,513,625)
Basic and diluted net loss per share	$	(7.68)

These amounts have been calculated after applying the Group's accounting policies and adjusting the results of Auxilium to reflect factually supportable adjustments that give effect to events that are directly attributable to the Auxilium acquisition assuming the Auxilium acquisition had occurred on January 1, 2015. These adjustments mainly include adjustments to interest expense and additional intangible amortization. The adjustments to interest expense, net of tax, related to borrowings to finance the acquisition increased the expense by $1.1 million for the year ended December 31, 2015. In addition, the adjustments include additional intangible amortization, net of tax, which would have been charged assuming the Group's estimated fair value of the intangible assets. The adjustment to the amortization expense for the year ended December 31, 2015 increased the expense by $6.2 million.

Acquisition of Par Pharmaceutical Holdings, Inc.

On September 25, 2015 (Par Acquisition Date), the Group acquired Par, a specialty pharmaceutical company that develops, licenses, manufactures, markets and distributes innovative and cost-effective pharmaceuticals with a focus on high-barrier-to-entry products and first-to-file or first-to-market opportunities, for total consideration of $8.14 billion, including the assumption of Par debt. The consideration included the Group's 18,069,899 ordinary shares valued at $1.33 billion.

The operating results of Par are included in the accompanying Consolidated Profit and Loss Account for the year ended December 31, 2016 and the operating results from the acquisition date of September 25, 2015 are included in the accompanying Consolidated Profit and Loss Account for the year ended December 31, 2015. The Consolidated Balance Sheets as of December 31, 2016 and 2015 reflect the acquisition of Par. The amounts of Par Turnover and Net loss attributable to Endo International plc included in the Group's Consolidated Profit and Loss Account for the year ended December 31, 2015 from and including September 25, 2015 to December 31, 2015 are as follows (in thousands, except per share data):

Turnover	$	401,238
Net loss attributable to Endo International plc	$	(4,348)
Basic and diluted net loss per share	$	(0.02)

The following table summarizes the fair values of the assets acquired and liabilities assumed at the Par Acquisition Date, including measurement period adjustments since the fair values presented in the Group's Form 10-K for the year ended December 31, 2015 filed with the SEC on February 29, 2016, (in thousands):

	September 25, 2015	Measurement period adjustments	September 25, 2015 (As adjusted)
Cash at bank and in-hand	$ 215,612	$ —	$ 215,612
Accounts and other receivables	530,664	(13,755)	516,909
Stock	330,406	(1,849)	328,557
Prepaid expenses and other current assets	31,124	—	31,124
Deferred income tax assets, current	14,652	30,176	44,828
Tangible fixed assets	256,293	4,744	261,037
Intangible assets	3,627,000	(154,500)	3,472,500
Other assets	8,477	—	8,477
Total identifiable assets	$ 5,014,228	$ (135,184)	$ 4,879,044
Accounts payable and accrued expenses	$ 551,614	$ (511)	$ 551,103
Deferred income tax liabilities	1,093,779	(44,961)	1,048,818
Other liabilities	16,057	2,556	18,613
Total liabilities assumed	$ 1,661,450	$ (42,916)	$ 1,618,534
Net identifiable assets acquired	$ 3,352,778	$ (92,268)	$ 3,260,510
Goodwill	4,782,876	92,268	4,875,144
Net assets acquired	$ 8,135,654	$ —	$ 8,135,654

Our measurement period adjustments for Par were complete as of September 30, 2016. As a result of the measurement period adjustments recorded above, the Group recorded a reduction of $3.8 million of expense, $3.1 million related to the amortization of intangible assets and $0.7 million related to the amortization of stock step-up, during the year ended December 31, 2016. During the three months ended December 31, 2015, the Group recorded an additional $3.1 million of expense related to the amortization of stock step-up and intangible assets, which related to the third quarter of 2015.

The valuation of the intangible assets acquired and related amortization periods are as follows:

	Valuation (in millions)	Amortization period (in years)
Developed Technology:		
Vasostrict®	$ 556.0	8
Aplisol®	312.4	11
Developed - Other - Non-Partnered (Generic Non-Injectable)	230.4	7
Developed - Other - Partnered (Combined)	164.4	7
Nascobal®	118.3	9
Developed - Other - Non-Partnered (Generic Injectable)	116.4	10
Other	517.9	9
Total	$ 2,015.8	
In Process Research & Development (IPR&D):		
IPR&D 2019 Launch	$ 401.0	n/a
IPR&D 2018 Launch	283.8	n/a
Ezetimibe	147.6	n/a
IPR&D 2016 Launch	133.3	n/a
Ephedrine Sulphate	128.6	n/a
Neostigmine vial	118.6	n/a
Other	243.8	n/a
Total	$ 1,456.7	n/a
Total other intangible assets	$ 3,472.5	n/a

The fair values of the developed technology and IPR&D assets were estimated using a discounted present value income approach. Under this method, an intangible asset's fair value is equal to the present value of the incremental after-tax cash flows (excess earnings) attributable solely to the intangible asset over its remaining useful life. To calculate fair value, the Group used cash flows discounted at rates ranging from 9% to 10.5%, which were considered appropriate given the inherent risks associated with each type of asset. The Group believes that the level and timing of cash flows appropriately reflect market participant assumptions.

The goodwill recognized is attributable primarily to strategic and synergistic opportunities related to existing pharmaceutical businesses, the assembled workforce of Par and other factors. At the acquisition date, approximately $34.2 million of goodwill was expected to be deductible for income tax purposes.

Deferred tax assets and liabilities are related primarily to the difference between the book basis and tax basis of identifiable intangible assets and stock step-up.

The following supplemental unaudited pro forma information presents the financial results as if the acquisition of Par had occurred on January 1, 2015 for the year ended December 31, 2015. This supplemental pro forma information has been prepared for comparative purposes and does not purport to be indicative of what would have occurred had the acquisition been made on January 1, 2015, nor are they indicative of any future results.

	Year Ended December 31, 2015
Unaudited pro forma consolidated results (in thousands, except per share data):	
Turnover	$ 4,268,110
Net loss attributable to Endo International plc	$ (1,594,130)
Basic and diluted net loss per share	$ (8.09)

These amounts have been calculated after applying the Group's accounting policies and adjusting the results of Par to reflect factually supportable adjustments that give effect to events that are directly attributable to the Par acquisition assuming the Par acquisition had occurred on January 1, 2015. These adjustments mainly include adjustments to interest expense and additional intangible amortization. The adjustments to interest expense, net of tax, related to borrowings to finance the acquisition increased the expense by $11.7 million for the year ended December 31, 2015. In addition, the adjustments include additional intangible amortization, net of tax, that would have been charged assuming the Group's estimated fair value of the intangible assets. An adjustment to the amortization expense for the year ended December 31, 2015 increased the expense by $129.2 million.

Aspen Holdings

On October 1, 2015, the Group acquired a broad portfolio of branded and generic injectable and established products focused on pain, anti-infectives, cardiovascular and other specialty therapeutic areas from a subsidiary of Aspen Pharmacare Holdings Ltd, a leading publicly-traded South African company that supplies branded and generic products in more than 150 countries, and from GlaxoSmithKline plc (GSK) for total consideration of approximately $135.6 million (the Aspen Asset Acquisition). The Group is accounting for this transaction as a business combination in accordance with the relevant accounting literature. The transaction expanded the Group's presence in South Africa.

The operating results of the Aspen Asset Acquisition are included in the accompanying Consolidated Profit and Loss Account for the year ended December 31, 2016 and the operating results from the acquisition date of October 1, 2015 are included in the accompanying Consolidated Profit and Loss Account for the year ended December 31, 2015. The Consolidated Balance Sheets as of December 31, 2016 and 2015 reflect the Aspen Asset Acquisition. Aspen Holdings is part of our Litha business, and as of December 31, 2016, the assets and liabilities of the Litha business, including the assets acquired in the Aspen Asset Acquisition, are classified as held for sale as further discussed in Note 3. Discontinued Operations and Held for Sale. Our measurement period adjustments for the Aspen Asset Acquisition were complete as of September 30, 2016.

Pro forma results of operations have not been presented because the effect of the Aspen Asset Acquisition was not material.

Voltaren® Gel

The Group had exclusive U.S. marketing rights to Voltaren® Gel through June 30, 2016 pursuant to a License and Supply Agreement entered into in 2008 with and among Novartis AG and Novartis Consumer Health, Inc. (the 2008 Voltaren® Gel Agreement). On December 11, 2015, the Group, Novartis AG and Sandoz entered into a new License and Supply Agreement (the 2015 Voltaren® Gel Agreement) whereby the Group licensed exclusive U.S. marketing and license rights to commercialize Voltaren® Gel and to launch an authorized generic of Voltaren® Gel effective July 1, 2016. Pursuant to the 2015 Voltaren® Gel Agreement, the former 2008 Voltaren® Gel Agreement expired on June 30, 2016 in accordance with its terms.

The Group is accounting for this transaction as a business combination as of the effective date in accordance with the relevant accounting literature. The Group acquired the product for consideration of approximately $162.7 million, consisting of an upfront payment of $16.2 million and contingent cash consideration with an acquisition-date fair value of approximately $146 million, including the impact of a measurement period adjustment recorded during the fourth quarter of 2016. See Note 7. Fair Value Measurements for further discussion of this contingent consideration. See Note 11. License and Collaboration Agreements for further discussion of the License and Supply Agreement.

The preliminary fair values of the net identifiable assets acquired totaled approximately $162.7 million, resulting in no goodwill. The amount of net identifiable assets acquired in connection with the Voltaren® Gel acquisition includes approximately $162.7 million of identifiable developed technology intangible assets to be amortized over an average life of approximately 7 years. Our measurement period adjustments for the acquisition of Voltaren® Gel were complete as of December 31, 2016.

The operating results of Voltaren® Gel under business combination accounting effective July 1, 2016 are included in the accompanying Consolidated Profit and Loss Account for the six months ended December 31, 2016. The results included in the accompanying Consolidated Profit and Loss Account for the year ended December 31, 2015 and for the six months ended June 30, 2016, were accounted for under the previous license and supply agreement, which was not treated as a business combination.

NOTE 6. SEGMENT RESULTS

The reportable business segments in which the Group operates are: (1) U.S. Generic Pharmaceuticals, (2) U.S. Branded Pharmaceuticals and (3) International Pharmaceuticals. These segments reflect the level at which the chief operating decision maker regularly reviews financial information to assess performance and to make decisions about resources to be allocated. Each segment derives turnover from the sales or licensing of its respective products and is discussed in more detail below.

We evaluate segment performance based on each segment's adjusted profit on ordinary activities before taxation, which we define as loss on ordinary activities before taxation before certain upfront and milestone payments to partners; acquisition-related and integration items, including transaction costs, earn-out payments or adjustments, changes in the fair value of contingent consideration and bridge financing costs; cost reduction and integration-related initiatives such as separation benefits, retention payments, other exit costs and certain costs associated with integrating an acquired company's operations; excess costs that will be eliminated pursuant to integration plans; asset impairment charges; amortization of intangible assets; stock step-up recorded as part of our acquisitions; certain non-cash interest expense; litigation-related and other contingent matters and gains or losses from early termination of debt; foreign currency gains or losses on intercompany financing arrangements; and certain other items.

Certain of the corporate general and administrative expenses incurred by the Group are not attributable to any specific segment. Accordingly, these costs are not allocated to any of the Group's segments and are included in the results below as "Corporate unallocated." The Group's consolidated adjusted profit on ordinary activities before taxation is equal to the combined results of each of its segments less these unallocated corporate costs.

U.S. Generic Pharmaceuticals

Our U.S. Generic Pharmaceuticals segment focuses on a differentiated product portfolio including high-barrier-to-entry products, first-to-file or first-to-market opportunities, which are difficult to formulate, difficult to manufacture or face complex legal and regulatory challenges. The product offerings of this segment include products in the pain management, urology, central nervous system disorders, immunosuppression, oncology, women's health and cardiovascular disease markets, among others.

U.S. Branded Pharmaceuticals

Our U.S. Branded Pharmaceuticals segment includes a variety of branded prescription products to treat and manage conditions in urology, urologic oncology, endocrinology, pain and orthopedics. The products that are included in this segment include XIAFLEX®, Supprelin® LA, Nascobal®, Aveed®, Testopel®, Lidoderm®, OPANA® ER, Voltaren® Gel, Percocet®, Fortesta® Gel, and Testim®, among others.

International Pharmaceuticals

Our International Pharmaceuticals segment includes a variety of specialty pharmaceutical products for the Canadian, Mexican, South African and world markets. Paladin, based in Canada, has a portfolio of products serving growing therapeutic areas, including ADHD, pain, women's health and oncology. Grupo Farmacéutico Somar, Sociedad Anónima Promotora de Inversión de Capital Variable (Somar), based in Mexico, develops, manufactures and markets high-quality generic, branded generic and over-the-counter products across key market segments including dermatology and anti-infectives. Litha, based in South Africa, is a diversified healthcare group providing services, products and solutions to public and private hospitals, pharmacies, general and specialist practitioners, as well as government healthcare programs.

The following represents selected information for the Group's reportable segments for the years ended December 31 (in thousands):

	2016	2015
Net turnover to external customers:		
U.S. Generic Pharmaceuticals	$ 2,564,613	$ 1,672,416
U.S. Branded Pharmaceuticals	1,166,294	1,284,607
International Pharmaceuticals (1)	279,367	311,695
Total net turnover to external customers	$ 4,010,274	$ 3,268,718
Adjusted profit on ordinary activities before taxation:		
U.S. Generic Pharmaceuticals	$ 1,079,479	$ 741,767
U.S. Branded Pharmaceuticals	553,806	694,440
International Pharmaceuticals	84,337	81,789
Total segment adjusted profit on ordinary activities before taxation	$ 1,717,622	$ 1,517,996

(1) Turnover generated by our International Pharmaceuticals segment are primarily attributable to Canada, Latin America and South Africa.

There were no material turnover from external customers attributed to an individual country outside of the United States during the years ended December 31, 2016 or 2015. There were no material tangible long-lived assets in an individual foreign country as of December 31, 2016 or December 31, 2015.

The table below provides reconciliations of our consolidated loss on ordinary activities before taxation, which is determined in accordance with U.S. GAAP, to our total segment adjusted profit on ordinary activities before taxation for the years ended December 31, (in thousands):

	2016	2015
Total consolidated loss on ordinary activities before taxation	$ (3,923,856)	$ (1,437,864)
Interest expense, net	452,679	373,214
Corporate unallocated costs (1)	189,043	171,242
Amortization of intangible assets	876,451	561,302
Stock step-up and certain manufacturing costs that will be eliminated pursuant to integration plans	125,699	249,464
Upfront and milestone payments to partners	8,330	16,155
Separation benefits and other cost reduction initiatives (2)	107,491	125,407
Impact of Voltaren® Gel generic competition	(7,750)	—
Acceleration of Auxilium employee equity awards at closing	—	37,603
Certain litigation-related charges, net (3)	23,950	37,082
Asset impairment charges (4)	3,781,165	1,140,709
Acquisition-related and integration items (5)	87,601	105,250
Loss on extinguishment of debt	—	67,484
Costs associated with unused financing commitments	—	78,352
Other-than-temporary impairment of equity investment	—	18,869
Foreign currency impact related to the remeasurement of intercompany debt instruments	366	(25,121)
Excise Tax	—	—
Other, net	(3,547)	(1,152)
Total segment adjusted profit on ordinary activities before taxation	$ 1,717,622	$ 1,517,996

(1) Corporate unallocated costs include certain corporate overhead costs, such as headcount and facility expenses and certain other income and expenses.

(2) Separation benefits and other cost reduction initiatives include employee separation costs of $57.9 million and $60.2 million in 2016 and 2015, respectively. Other amounts in 2016 primarily consist of charges to increase excess stock reserves of $24.5 million and other restructuring costs of $25.1 million, comprised primarily of contract termination fees and building costs. Amounts in 2015 primarily consist of $41.2 million of stock write-offs and $13.3 million of building costs, including a $7.9 million charge recorded upon the cease use date of our Auxilium subsidiary's former corporate headquarters. These amounts were primarily recorded as Cost of sales and Selling, general and administrative expense in our Consolidated Profit and Loss Account. See Note 4. Restructuring for discussion of our material restructuring initiatives.

(3) These amounts include charges for Litigation-related and other contingencies, net as further described in Note 13. Commitments and Contingencies.

(4) Asset impairment charges primarily relate to charges to write down goodwill and intangible assets as further described in Note 10. Goodwill and Other Intangibles.

(5) Acquisition-related and integration items include costs directly associated with previous acquisitions of $63.8 million and $170.9 million in 2016 and 2015, respectively. In addition, during the year ended December 31, 2016, there was a charge for changes in fair value of contingent consideration of $23.8 million. During the year ended December 31, 2015, acquisition-related and integration costs are net of a benefit due to changes in the fair value of contingent consideration of $65.6 million.

The following represents additional selected financial information for our reportable segments for the years ended December 31, (in thousands):

	2016	2015
Depreciation expense:		
U.S. Generic Pharmaceuticals	$ 79,839	$ 29,193
U.S. Branded Pharmaceuticals	16,294	19,884
International Pharmaceuticals	2,557	3,147
Corporate unallocated	8,168	7,674
Total depreciation expense	$ 106,858	$ 59,898

	2016	2015
Amortization expense:		
U.S. Generic Pharmaceuticals	$ 554,581	$ 223,367
U.S. Branded Pharmaceuticals	261,235	280,954
International Pharmaceuticals	60,635	56,981
Total amortization expense	$ 876,451	$ 561,302

Interest income and expense are considered corporate items and included in Corporate unallocated. Asset information is not reviewed or included within our internal management reporting. Therefore, the Group has not disclosed asset information for each reportable segment.

NOTE 7. FAIR VALUE MEASUREMENTS

Financial Instruments

The financial instruments recorded in our Consolidated Balance Sheets include cash at bank and in-hand (including money market funds and time deposits), restricted cash at bank and in-hand, accounts receivable, marketable securities, equity and cost method investments, accounts payable and accrued expenses, acquisition-related contingent consideration and debt obligations. Included in cash at bank and in-hand and restricted cash at bank and in-hand are money market funds representing a type of mutual fund required by law to invest in low-risk securities (for example, U.S. government bonds, U.S. Treasury Bills and commercial paper). Money market funds pay dividends that generally reflect short-term interest rates. Due to their short-term maturity, the carrying amounts of non-restricted and restricted cash at bank and in-hand (including money market funds and time deposits), accounts receivable, accounts payable and accrued expenses approximate their fair values.

Fair value guidance establishes a three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value. These tiers include:

- Level 1—Quoted prices in active markets for identical assets or liabilities.
- Level 2—Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.
- Level 3—Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

Marketable Securities

Equity securities consist of investments in the stock of publicly traded companies, the values of which are based on quoted market prices and thus represent Level 1 measurements within the above-defined fair value hierarchy. These securities are not held to support current operations and are therefore classified as non-current assets. Equity securities are included in Marketable securities in our Consolidated Balance Sheets at December 31, 2016 and 2015.

At the time of purchase, we classify our marketable securities as either available-for-sale securities or trading securities, depending on our intent at that time. Available-for-sale and trading securities are carried at fair value with unrealized holding gains and losses recorded within other comprehensive profit or net profit, respectively. The Group reviews unrealized losses associated with available-for-sale securities to determine the classification as a "temporary" or "other-than-temporary" impairment. A temporary impairment results in an unrealized loss being recorded in other comprehensive profit. An impairment that is viewed as other-than-temporary is recognized in net profit. The Group considers various factors in determining the classification, including the length of time and extent to which the fair value has been less than the Group's cost basis, the financial condition and near-term prospects of the issuer or investee, and the Group's ability to hold the investment for a period of time sufficient to allow for any anticipated recovery in market value.

Loans Receivable

We did not have any loans receivable as of December 31, 2016. Our loans receivable at December 31, 2015 related primarily to loans totaling $14.1 million to our joint venture investment owned through our Litha subsidiary. The joint venture investment is further described below. The majority of this amount was secured by certain of the assets of our joint venture. The fair values of these loans were based on anticipated cash flows, which approximated the carrying amount, and were classified in Level 2 measurements in the fair value hierarchy. The Group classified these loans receivable as Assets held for sale as of December 31, 2015 in its Consolidated Balance Sheets.

Equity and Cost Method Investments

As of December 31, 2016, the Group has investments that it accounts for using the equity or cost method of accounting totaling $9.1 million. The Group divested a joint venture investment owned through its Litha subsidiary during the three months ended March 31, 2016. The Group classified this joint venture investment as Assets held for sale as of December 31, 2015 in its Consolidated Balance Sheets.

During the three months ended June 30, 2015, the Group recognized an other-than-temporary impairment of its Litha joint venture investment totaling $18.9 million, reflecting the excess carrying value of this investment over its estimated fair value. To estimate the fair value of this joint venture investment, the Group relied primarily on a market approach based on the terms of the announced divestiture of that investment.

With respect to its other equity or cost method investments, which are included in Other Assets in the Group's Consolidated Balance Sheets at December 31, 2016 and 2015, the Group did not recognize any other-than-temporary impairments. The Group considered various factors, including the operating results of its equity method investments and the lack of an unrealized loss position on its cost method investments.

Acquisition-Related Contingent Consideration

The fair value of contingent consideration liabilities is determined using unobservable inputs; hence these instruments represent Level 3 measurements within the above-defined fair value hierarchy. These inputs include the estimated amount and timing of projected cash flows, the probability of success (achievement of the contingent event) and the risk-adjusted discount rate used to present value the probability-weighted cash flows. Subsequent to the acquisition date, at each reporting period, the contingent consideration liability is remeasured at current fair value with changes recorded in earnings. See Recurring Fair Value Measurements below for additional information on acquisition-related contingent consideration.

Recurring Fair Value Measurements

The Group's financial assets and liabilities measured at fair value on a recurring basis at December 31, 2016 and 2015 were as follows (in thousands):

	Fair Value Measurements at Reporting Date using:			
December 31, 2016	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
Assets:				
Money market funds	$ 26,210	$ —	$ —	$ 26,210
Time deposits	—	100,000	—	100,000
Equity securities	2,267	—	—	2,267
Total	$ 28,477	$ 100,000	$ —	$ 128,477
Liabilities:				
Acquisition-related contingent consideration—short-term	$ —	$ —	$ 109,373	$ 109,373
Acquisition-related contingent consideration—long-term	—	—	152,740	152,740
Total	$ —	$ —	$ 262,113	$ 262,113

At December 31, 2016, money market funds include $26.2 million in Qualified Settlement Funds to be disbursed to mesh-related product liability claimants. See Note 13. Commitments and Contingencies for further discussion of our product liability cases.

	Fair Value Measurements at Reporting Date using:			
December 31, 2015	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
Assets:				
Money market funds	$ 51,145	$ —	$ —	$ 51,145
Equity securities	3,889	—	—	3,889
Total	$ 55,034	$ —	$ —	$ 55,034
Liabilities:				
Acquisition-related contingent consideration—short-term	$ —	$ —	$ 65,265	$ 65,265
Acquisition-related contingent consideration—long-term	—	—	78,237	78,237
Total	$ —	$ —	$ 143,502	$ 143,502

At December 31, 2015, money market funds include $51.1 million in Qualified Settlement Funds to be disbursed to mesh-related product liability claimants. See Note 13. Commitments and Contingencies for further discussion of our product liability cases.

Fair Value Measurements Using Significant Unobservable Inputs

The following table presents changes to the Group's liability for acquisition-related contingent consideration, which was measured at fair value on a recurring basis using significant unobservable inputs (Level 3) for the years ended December 31 (in thousands):

	2016	2015
Beginning of period	$ 143,502	$ 46,005
Amounts acquired	146,866	214,435
Amounts settled	(55,896)	(37,583)
Transfers (in) and/or out of Level 3	—	—
Measurement period adjustments	3,700	(13,434)
Changes in fair value recorded in earnings	23,823	(65,640)
Effect of currency translation	118	(281)
End of period	$ 262,113	$ 143,502

The fair value measurement of the contingent consideration obligations was determined using risk-adjusted discount rates ranging from 3.0% to 22.0%. Changes in fair value recorded in earnings related to acquisition-related contingent consideration are included in our Consolidated Profit and Loss Account as Acquisition-related and integration items, and amounts recorded for the short-term and long-term portions of acquisition related contingent consideration are included in Accounts payable and accrued expenses and Other liabilities, respectively, in our Consolidated Balance Sheets.

The following table presents changes to the Group's liability for acquisition-related contingent consideration during the year ended December 31, 2016 by acquisition (in thousands):

	Balance as of December 31, 2015	Acquisitions	Fair Value Adjustments and Accretion	Payments and Other	Balance as of December 31, 2016
Qualitest acquisition	$ 1,137	$ —	$ (1,137)	$ —	$ —
Sumavel acquisition	631	—	(631)	—	—
Auxilium acquisition	26,435	—	8,952	(14,290)	21,097
Lehigh Valley Technologies, Inc. acquisitions	97,003	—	30,676	(31,679)	96,000
Voltaren Gel® acquisition	—	146,055	(18,807)	(8,853)	118,395
Other	18,296	4,511	4,770	(956)	26,621
Total	$ 143,502	$ 150,566	$ 23,823	$ (55,778)	$ 262,113

The following table presents changes to the Group's liability for acquisition-related contingent consideration during the year ended December 31, 2015 by acquisition (in thousands):

	Balance as of December 31, 2014	Acquisitions	Fair Value Adjustments and Accretion	Payments and Other	Balance as of December 31, 2015
Qualitest acquisition	$ 10,305	$ —	$ (4,168)	$ (5,000)	$ 1,137
Sumavel acquisition	4,700	—	(4,069)	—	631
Auxilium acquisition	—	98,179	(62,370)	(9,374)	26,435
Lehigh Valley Technologies, Inc. acquisitions	—	88,200	31,071	(22,268)	97,003
Natesto™	31,000	(4,313)	(26,687)	—	—
Other	—	18,935	583	(1,222)	18,296
Total	$ 46,005	$ 201,001	$ (65,640)	$ (37,864)	$ 143,502

The following is a summary of available-for-sale securities held by the Group at December 31, 2016 and 2015 (in thousands):

	Available-for-sale			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized (Losses)	Fair Value
December 31, 2016				
Money market funds	$ 26,210	$ —	$ —	$ 26,210
Total included in cash at bank and in-hand	$ —	$ —	$ —	$ —
Total included in restricted cash at bank and in-hand	$ 26,210	$ —	$ —	$ 26,210
Equity securities	$ —	$ —	$ —	$ —
Total other short-term available-for-sale securities	$ —	$ —	$ —	$ —
Equity securities	$ 1,766	$ 501	$ —	$ 2,267
Long-term available-for-sale securities	$ 1,766	$ 501	$ —	$ 2,267

	Available-for-sale			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized (Losses)	Fair Value
December 31, 2015				
Money market funds	$ 51,145	$ —	$ —	$ 51,145
Total included in cash at bank and in-hand	$ 3	$ —	$ —	$ 3
Total included in restricted cash at bank and in-hand	$ 51,142	$ —	$ —	$ 51,142
Equity securities	$ 24	$ 10	$ —	$ 34
Total other short-term available-for-sale securities	$ 24	$ 10	$ —	$ 34
Equity securities	$ 1,766	$ 2,089	$ —	$ 3,855
Long-term available-for-sale securities	$ 1,766	$ 2,089	$ —	$ 3,855

The following table presents changes to the Group's equity securities for the years ended December 31, 2016 and 2015 (in thousands):

	2016	2015
Beginning of period	$ 3,855	$ 1,506
Changes in fair value	(1,588)	2,349
End of period	$ 2,267	$ 3,855

Nonrecurring Fair Value Measurements

The Group’s financial assets and liabilities measured at fair value on a nonrecurring basis as of December 31, 2016 were as follows (in thousands):

	Fair Value Measurements at Reporting Date using:			
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total Expense for the Year Ended December 31, 2016
Assets:				
Certain Astora tangible fixed assets (Note 3)	$ —	$ —	$ —	$ (5,041)
Certain U.S. Generics Pharmaceuticals tangible fixed assets	—	—	11,360	(13,679)
Certain U.S. Branded Pharmaceuticals intangible assets (Note 10)	—	—	4,621	(110,430)
Certain U.S. Generic Pharmaceuticals intangible assets (Note 10)	—	—	872,474	(676,776)
Certain International Pharmaceuticals intangible assets (Note 10)	—	—	139,313	(301,698)
Certain Astora intangible assets (Note 3)	—	—	—	(16,287)
Generics reporting unit goodwill (Note 10)	—	—	3,531,301	(2,342,549)
Paladin reporting unit goodwill (Note 10)	—	—	170,572	(272,578)
Somar reporting unit goodwill (Note 10)	—	—	24,044	(33,000)
Litha reporting unit goodwill (Note 10)	—	—	—	(26,343)
Other asset impairment charges	—	—	—	(4,112)
Total	$ —	$ —	$ 4,753,685	$ (3,802,493)

The Group's financial assets and liabilities measured at fair value on a nonrecurring basis as of December 31, 2015 were as follows (in thousands):

	Fair Value Measurements at Measurement Date using:			
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total Expense for the Year Ended December 31, 2015
Assets:				
Auxilium leasehold improvements (Note 4)	$ —	$ —	$ —	$ (7,000)
Litha equity investment	—	—	10,469	(18,869)
Certain U.S. Branded Pharmaceuticals intangible assets (Note 10)	—	—	48,266	(175,031)
Certain U.S. Generic Pharmaceuticals intangible assets (Note 10)	—	—	38,005	(181,000)
Certain International Pharmaceuticals intangible assets (Note 10)	—	—	3,838	(14,579)
UEO reporting unit goodwill (Note 10)	—	—	240,994	(673,500)
Paladin reporting unit goodwill (Note 10)	—	—	436,919	(85,780)
Total	$ —	$ —	$ 778,491	$ (1,155,759)
Liabilities:				
Minimum Voltaren® Gel royalties due to Novartis	—	—	15,000	—
Total	$ —	$ —	$ 15,000	$ —

NOTE 8. STOCK

Stock consists of the following at December 31, 2016 and 2015 (in thousands):

	December 31, 2016	December 31, 2015
Raw materials (1)	$ 175,240	$ 210,038
Work-in-process (1)	100,494	177,821
Finished goods (1)	279,937	364,634
Total	$ 555,671	$ 752,493

(1) The components of stock shown in the table above are net of allowance for obsolescence.

Stock that is in excess of the amount expected to be sold within one year, which relates primarily to XIAFLEX® stock, is classified as long-term stock and is not included in the table above. At December 31, 2016 and 2015, $22.9 million and $24.9 million, respectively, of long-term stock was included in Other assets in the Consolidated Balance Sheets.

The Group capitalizes stock costs associated with certain generic products prior to regulatory approval and product launch, when it is reasonably certain, based on management's judgment of future commercial use and net realizable value, that the pre-launch stock will be saleable. The determination to capitalize is made once the Group (or its third party development partners) has filed an Abbreviated New Drug Application (ANDA) that has been acknowledged by the U.S. Food and Drug Administration (FDA) as containing sufficient information to allow the FDA to conduct its review in an efficient and timely manner and management is reasonably certain that all regulatory and legal requirements will be cleared. This determination is based on the particular facts and circumstances relating to the expected FDA approval of the generic drug product being considered, and accordingly, the time frame within which the determination is made varies from product to product. The Group could be required to write down previously capitalized costs related to pre-launch stock upon a change in such judgment, or due to a denial or delay of approval by regulatory bodies, or a delay in commercialization, or other potential factors. As of December 31, 2016 and 2015, the Group had approximately $16.8 million and $12.0 million, respectively, in stock related to generic products that was not yet available to be sold.

As of December 31, 2016 and 2015, $68.0 million and $101.6 million, respectively, of employee costs were capitalized as part of stock.

NOTE 9. TANGIBLE FIXED ASSETS

Tangible fixed assets consist of the following:

	Land and Buildings	Machinery and Equipment	Leasehold Improve-ments	Computer Equipment and Software	Assets under Capital Lease	Furniture and Fixtures	Assets under Construc-tion	Total
				(In thousands)				
Cost:								
At January 1, 2016	$ 337,545	$ 186,547	$ 46,478	$ 126,608	$ 9,121	$ 20,762	$ 109,883	$ 836,944
Additions	12,346	64,687	5,549	29,009	716	830	25,273	138,410
Additions due to acquisitions	883	1,085	(73)	766	—	510	1,573	4,744
Disposals/transfers/ impairments/other	(27,298)	(24,388)	(1,448)	(37,656)	(682)	(982)	(7,541)	(99,995)
Effect of currency translation	(939)	(98)	(147)	201	—	(34)	(86)	(1,103)
At December 31, 2016	$ 322,537	$ 227,833	$ 50,359	$ 118,928	$ 9,155	$ 21,086	$ 129,102	$ 879,000
Accumulated Depreciation:								
At January 1, 2016	$ (41,987)	$ (39,512)	$ (11,094)	$ (64,819)	$ (3,458)	$ (2,558)	$ 2,108	$ (161,320)
Additions	(25,394)	(36,522)	(7,640)	(31,885)	(3,015)	(2,402)	—	(106,858)
Disposals/transfers/ impairments/other	16,427	11,650	(2,553)	33,891	700	497	(2,108)	58,504
Effect of currency translation	184	65	24	(23)	—	20	—	270
At December 31, 2016	$ (50,770)	$ (64,319)	$ (21,263)	$ (62,836)	$ (5,773)	$ (4,443)	$ —	$ (209,404)
Net Book Amount:								
At December 31, 2016	$ 271,767	$ 163,514	$ 29,096	$ 56,092	$ 3,382	$ 16,643	$ 129,102	$ 669,596
At December 31, 2015	$ 295,558	$ 147,035	$ 35,384	$ 61,789	$ 5,663	$ 18,204	$ 111,991	$ 675,624

	Land and Buildings	Machinery and Equipment	Leasehold Improve-ments	Computer Equipment and Software	Assets under Capital Lease	Furniture and Fixtures	Assets under Construc-tion	Total
				(In thousands)				
Cost:								
At January 1, 2015	$ 223,841	$ 91,899	$ 16,165	$ 88,984	$ 6,082	$ 3,218	$ 79,861	$ 510,050
Additions	18,068	12,353	6,736	26,963	3,502	1,605	10,056	79,283
Additions due to acquisitions	98,969	95,848	28,091	20,633	—	16,530	23,383	283,454
Disposals/transfers/ impairments/other	(335)	(12,046)	(4,117)	(9,054)	(463)	(308)	(3,381)	(29,704)
Effect of currency translation	(2,998)	(1,507)	(397)	(918)	—	(283)	(36)	(6,139)
At December 31, 2015	$ 337,545	$ 186,547	$ 46,478	$ 126,608	$ 9,121	$ 20,762	$ 109,883	$ 836,944
Accumulated Depreciation:								
At January 1, 2015	$ (30,656)	$ (36,399)	$ (8,034)	$ (42,043)	$ (1,820)	$ (1,035)	$ (3,011)	$ (122,998)
Additions	(13,284)	(13,865)	(8,964)	(20,541)	(2,514)	(2,032)	—	(61,200)
Disposals/transfers/ impairments/other	1,251	9,766	5,736	(2,950)	876	266	5,119	20,064
Effect of currency translation	702	986	168	715	—	243	—	2,814
At December 31, 2015	$ (41,987)	$ (39,512)	$ (11,094)	$ (64,819)	$ (3,458)	$ (2,558)	$ 2,108	$ (161,320)
Net Book Amount:								
At December 31, 2015	$ 295,558	$ 147,035	$ 35,384	$ 61,789	$ 5,663	$ 18,204	$ 111,991	$ 675,624
At December 31, 2014	$ 193,185	$ 55,500	$ 8,131	$ 46,941	$ 4,262	$ 2,183	$ 76,850	$ 387,052

Depreciation expense, including expense related to assets under capital lease, was $106.9 million and $59.9 million for the years ended December 31, 2016 and 2015, respectively.

During the years ended December 31, 2016 and 2015, the Group recorded impairment charges totaling $20.9 million and $10.8 million, respectively, to write off certain tangible fixed assets amounts that were abandoned or sold. These charges were related to our ongoing efforts to improve our operating efficiency and to consolidate certain locations, including our generics manufacturing and research and development operations. These charges are included in the Asset impairment charges line item in our Consolidated Profit and Loss Account.

NOTE 10. GOODWILL AND OTHER INTANGIBLES

Goodwill and intangible assets consists of the following:

	Goodwill	In-process Research and Development	Licenses	Customer Relationships	Tradenames	Developed Technology	Total
				(In thousands)			
Cost:							
At January 1, 2015	$ 2,897,775	$ 190,597	$ 664,367	$ 30,000	$ 21,315	$ 2,251,119	$ 6,055,173
Additions	5,270,301	1,628,400	12,500	—	—	4,901,716	11,812,917
Impairments/other	—	(63,782)	—	(18,682)	(13,591)	(298,700)	(394,755)
Effect of currency translations	(109,442)	(12,335)	—	—	(187)	(122,562)	(244,526)
At January 1, 2016	$ 8,058,634	$ 1,742,880	$ 676,867	$ 11,318	$ 7,537	$ 6,731,573	$17,228,809
Additions	—	(114,200)	—	—	—	152,591	38,391
Impairments/other	93,634	(506,531)	(211,147)	(11,318)	—	(668,319)	(1,303,681)
Effect of currency translations	3,336	1,432	—	—	(192)	7,159	11,735
At December 31, 2016	$ 8,155,604	$ 1,123,581	$ 465,720	$ —	$ 7,345	$ 6,223,004	$15,975,254
Accumulated Impairment Losses and Depreciation:							
At January 1, 2015	$ —	$ —	$ (426,413)	$ (7,525)	$ (5,462)	$ (350,256)	$ (789,656)
Charge	(759,280)	—	(81,812)	(333)	(1,097)	(478,582)	(1,321,104)
Effect of currency translations	—	—	—	—	15	10,232	10,247
At January 1, 2016	$ (759,280)	$ —	$ (508,225)	$ (7,858)	$ (6,544)	$ (818,606)	$(2,100,513)
Charge	(2,676,350)	—	(44,522)	—	(87)	(831,842)	(3,552,801)
Other	—	—	211,147	7,858	—	36,911	255,916
Effect of currency translations	9,421	—	—	—	32	1,383	10,836
At December 31, 2016	$(3,426,209)	$ —	$ (341,600)	$ —	$ (6,599)	$(1,612,154)	$(5,386,562)
Net Book Amount:							
At December 31, 2016	$ 4,729,395	$ 1,123,581	$ 124,120	$ —	$ 746	$ 4,610,850	$10,588,692
At December 31, 2015	$ 7,299,354	$ 1,742,880	$ 168,642	$ 3,460	$ 993	$ 5,912,967	$15,128,296

Amortization expense for the years ended December 31, 2016 and 2015 totaled $876.5 million and $561.3 million, respectively. Estimated amortization of intangibles for the five fiscal years subsequent to December 31, 2016 is as follows (in thousands):

2017	$ 777,893
2018	$ 560,762
2019	$ 500,605
2020	$ 473,910
2021	$ 462,153

Changes in the gross carrying amount of our other intangibles for the year ended December 31, 2016 were as follows (in thousands):

	Gross Carrying Amount
December 31, 2015	$ 9,170,175
Capitalization of payments relating to XIAFLEX®	12,008
Voltaren® Gel acquisition	162,700
Other acquisitions	18,183
Sale of certain International Pharmaceuticals intangible assets	(1,959)
Impairment of certain U.S. Branded Pharmaceuticals intangible assets	(110,430)
Impairment of certain U.S. Generic Pharmaceuticals intangible assets	(676,776)
Impairment of certain International Pharmaceuticals intangible assets	(301,698)
Impairment of certain Astora intangible assets	(26,318)
Measurement period adjustments relating to acquisitions closed during 2015 (NOTE 5)	(154,500)
Removal of fully amortized intangible assets relating to expired or terminated licensing agreements	(221,853)
Transfer of intangible assets to Assets held for sale (NOTE 3)	(58,281)
Effect of currency translation	8,399
December 31, 2016	$ 7,819,650

Endo tests goodwill and indefinite-lived intangible assets for impairment annually, or more frequently whenever events or changes in circumstances indicate that the asset might be impaired. Our annual assessment is performed as of October 1st.

As part of the annual and interim goodwill and intangible asset impairment assessments, the Group estimates the fair values of its reporting units using an income approach that utilizes a discounted cash flow model, or, where appropriate, a market approach, or a combination thereof. The discounted cash flow models are dependent upon the Group's estimates of future cash flows and other factors. These estimates of future cash flows involve assumptions concerning (i) future operating performance, including future sales, long-term growth rates, operating margins, variations in the amount and timing of cash flows and the probability of achieving the estimated cash flows and (ii) future economic conditions. These assumptions are based on significant inputs not observable in the market and thus represent Level 3 measurements within the fair value hierarchy. The discount rates applied to the estimated cash flows for the Group's October 1, 2016 and 2015 annual goodwill and indefinite-lived intangible assets impairment test ranged from 8.5% to 11.0% and from 9.0% to 16.0% , respectively, depending on the overall risk associated with the particular assets and other market factors. The Group believes the discount rates and other inputs and assumptions are consistent with those that a market participant would use. Any impairment charges resulting from the annual and interim goodwill and intangible asset impairment assessments are recorded to Asset impairments charges on the Group's Consolidated Profit and Loss Account.

Goodwill

Results of 2016 Goodwill Impairment Testing

As part of its annual goodwill impairment test, the Group concluded that the carrying value of its U.S. Generics, Paladin, Somar and Litha reporting units exceeded their respective estimated fair values and recorded goodwill impairment charges of $2,342.5 million, $272.6 million, $33.0 million and $26.3 million, respectively. The impairments were a result of a combination of factors, including increased buying power from the continued consolidation of the Group's generic business customer base, a significant change in the value derived from the level and frequency of anticipated pricing opportunities in the future and increased levels of competition, particularly in the Group's U.S. Generics reporting unit, due to the entry of new low cost competitors and accelerated FDA ANDA approvals. Consequently, the Group lowered its projected turnover growth rates and profitability levels as part of its fourth quarter company-wide strategic forecasting process.

These external dynamics were exacerbated by an increase in the risk factor included in the discount rate used to calculate the U.S. Generics discounted cash flows from the date of the Group's last interim test. The increase in the discount rate was due to the implied control premium resulting from recent trading values of the Group's stock. On a combined basis, these factors reduced the resulting estimated fair value of the Group's reporting units.

As of December 31, 2016, the remaining balance of goodwill for the Group's U.S. Generics, U.S. Branded, Paladin, Somar and Litha reporting units was $3,531.3 million, $1,009.2 million, $166.4 million, $22.5 million and zero, respectively.

Results of 2015 Goodwill Impairment Testing

Given the results of our intangible asset assessment during the third quarter of 2015 for STENDRA® and certain testosterone replacement therapy (TRT) products, the Group initiated an interim goodwill impairment analysis of our Urology, Endocrinology and Oncology (UEO) reporting unit as of September 30, 2015. As a result of this interim analysis, the Group determined that the net book value of our UEO reporting unit exceeded its estimated fair value. The Group prepared this analysis on a preliminary basis to estimate the amount of a provisional impairment charge as of September 30, 2015, and determined that an impairment was probable and reasonably estimable. The preliminary fair value assessments were performed by the Group taking into consideration a number of factors, based upon the latest available information, including the preliminary results of a hypothetical purchase price allocation. As a result of the preliminary analysis, during the three months ended September 30, 2015, the Group recorded a provisional pre-tax, non-cash impairment charge of $680.0 million in the Consolidated Profit and Loss Account, representing the difference between the estimated implied fair value of the UEO reporting unit's goodwill and its respective net book value.

The Group completed its UEO goodwill impairment analysis during the fourth quarter of 2015 and reduced the provisional pre-tax, non-cash impairment charge by $6.5 million, for a net, pre-tax, non-cash impairment charge during the year ended December 31, 2015 of $673.5 million. During the fourth quarter of 2015, the Group combined certain resources within the Branded business and management realigned how they review the segment's performance. As a result, we determined that our Pain and UEO reporting units should be combined into one Branded reporting unit for purposes of testing goodwill as of October 1, 2015. In addition to testing the Pain and UEO reporting units separately for goodwill impairment as of October 1, 2015, the Group also tested the combined Branded reporting unit for impairment. The impairment tests did not result in any additional charge for the quarter ended December 31, 2015. As of December 31, 2015, the remaining balance of goodwill for the Branded reporting unit was approximately $1,002.8 million.

As part of the annual goodwill impairment test, the Group recorded a pre-tax, non-cash impairment charge of $85.8 million in the Consolidated Profit and Loss Account during the fourth quarter of 2015, representing the difference between the estimated implied fair value of the Paladin reporting unit's goodwill and its respective net book value, primarily due to the loss of exclusivity on certain products sold in Canada. As of December 31, 2015, the remaining balance of goodwill for the Paladin reporting unit was approximately $420.4 million.

Intangible Assets

A summary of significant other intangible asset impairment charges by reportable segment for the two years ended December 31 is included below.

U.S. Generic Pharmaceuticals Segment

During the three months ended March 31, 2016 and June 30, 2016, the Group identified certain market and regulatory conditions impacting the commercial potential of certain indefinite and definite-lived intangible assets in our U.S. Generic Pharmaceuticals segment. Accordingly, we tested these assets for impairment and determined that the carrying value of certain of these assets was no longer fully recoverable, resulting in pre-tax, non-cash asset impairment charges of $29.3 million and $40.0 million during the first and second quarters of 2016, respectively. In addition, during the first quarter of 2016, the Group recognized pre-tax, non-cash asset impairment charges of $100.3 million related to the 2016 U.S. Generic Pharmaceuticals restructuring initiative, which resulted from the discontinuation of certain commercial products and the abandonment of certain IPR&D projects. See Note 4. Restructuring for discussion of our material restructuring initiatives. During the fourth quarter of 2016, the Group recognized pre-tax, non-cash intangible asset impairment charges of $507.2 million in our U.S. Generic Pharmaceuticals resulting from certain market conditions, including price erosion and increased competition, impacting the commercial potential of definite and indefinite-lived intangible assets, including higher than expected erosion rates in the U.S. Generic Pharmaceuticals base business.

During the year ended December 31, 2015, the Group identified certain market and regulatory conditions impacting the commercial potential of certain indefinite and definite-lived intangible assets in our U.S. Generic Pharmaceuticals segment. Accordingly, we tested these assets for impairment and determined that the carrying value of certain of these assets was no longer fully recoverable, resulting in pre-tax, non-cash asset impairment charges of $70.2 million, $72.4 million and $38.4 million, respectively, during the second, third and fourth quarters of 2015.

U.S. Branded Pharmaceuticals Segment

As a result of unfavorable formulary changes and generic competition for sumatriptan, the Group has experienced a downturn in the performance of its Sumavel® DosePro® (Sumavel®) product, a needle-free delivery system for sumatriptan acquired from Zogenix, Inc. in 2014. As a result of this underperformance, the Group concluded during the third quarter of 2016 that an impairment assessment was required to evaluate the recoverability of Sumavel®. After performing this assessment, we recorded a pre-tax, non-cash impairment charge of $72.8 million during the three months ended September 30, 2016, representing a full impairment of the intangible asset. During the fourth quarter of 2016, the Group recognized pre-tax, non-cash intangible asset impairment charges of $37.6 million in our U.S. Branded Pharmaceuticals segment resulting primarily from the termination of our BELBUCA™ product and the return of this product to BDSI.

During the year ended December 31, 2015, a sustained downturn in the short-acting TRT market caused underperformance across several of our TRT products, including Testim® and Natesto™. In addition, we also experienced underperformance with respect to STENDRA®. As a result of this underperformance and a re-alignment of investment priorities towards higher growth and higher value assets such as XIAFLEX®, the Group concluded during the third quarter of 2015 that an impairment assessment was required to evaluate the recoverability of certain definite-lived intangible assets associated with these products. After performing this assessment, we recorded a pre-tax, non-cash impairment charge of approximately $152.0 million during the third quarter of 2015, representing a full impairment of our Natesto™ intangible asset and a partial impairment of our Testim® and STENDRA® intangible assets. As a result of the Group providing written notice to VIVUS Inc. on December 30, 2015 that we were terminating the STENDRA® License Agreement effective June 30, 2016, we recorded an additional pre-tax, non-cash impairment charge of approximately $9.5 million, representing the remaining carrying amount of our STENDRA® intangible asset. Additionally, during the fourth quarter of 2015, we determined that the fair value of certain U.S. Branded Pharmaceuticals IPR&D assets were less than their respective carrying amounts, and we recorded a pre-tax, non-cash impairment charge of $5.5 million representing the full carrying amount of the assets.

International Pharmaceuticals Segment

During the three months ended September 30, 2016, the Group determined that it would not pursue commercialization of a product in certain international markets. Accordingly, we tested the definite-lived intangible asset associated with this product for impairment and determined that the carrying value was no longer fully recoverable, resulting in pre-tax, non-cash asset impairment charge of $16.2 million during the third quarter of 2016. During the fourth quarter of 2016, the Group recognized pre-tax, non-cash intangible asset impairment charges of $285.5 million in our International Pharmaceuticals segment resulting from certain market conditions impacting the commercial potential of definite and indefinite-lived intangible assets.

As part of our definite-lived intangible asset impairment review processes for 2015, the Group recorded pre-tax, non-cash impairment charges of approximately $14.6 million in our International Pharmaceuticals segment, representing the difference between the carrying amount of certain intangible assets and their estimated fair value.

NOTE 11. LICENSE AND COLLABORATION AGREEMENTS

Our subsidiaries have entered into certain license, collaboration and discovery agreements with third parties for product development. These agreements require our subsidiaries to share in the development costs of such products and the third parties grant marketing rights to our subsidiaries for such products.

The Group and its subsidiaries are generally required to make upfront payments as well as other payments upon successful completion of regulatory or sales milestones. In addition, these agreements generally require our subsidiaries to pay royalties on sales of the products arising from these agreements. These agreements generally permit termination by our subsidiaries with no significant continuing obligation.

Novartis AG, Novartis Consumer Health, Inc. and Sandoz, Inc.

The Group had exclusive U.S. marketing rights to Voltaren® Gel through June 30, 2016 pursuant to a License and Supply Agreement entered into in 2008 with and among Novartis AG and Novartis Consumer Health, Inc. Effective March 1, 2015, Novartis Consumer Health, Inc. assigned the 2008 Voltaren® Gel Agreement to its affiliate, Sandoz, Inc. On December 11, 2015, the Group, Novartis AG and Sandoz entered into a new License and Supply Agreement, the 2015 Voltaren® Gel Agreement, whereby the Group licensed exclusive U.S. marketing and license rights to commercialize Voltaren® Gel and the exclusive right to launch an authorized generic of Voltaren® Gel, effective July 1, 2016. Pursuant to the 2015 Voltaren® Gel Agreement, the former 2008 Voltaren® Gel Agreement expired on June 30, 2016 in accordance with its terms. The 2015 Voltaren® Gel Agreement became effective on July 1, 2016 and is accounted for as a business combination as of the effective date. Refer to Note 5. Acquisitions for further information. The initial term of the 2015 Voltaren® Gel Agreement will expire on June 30, 2023 with an automatic extension of the term for one year thereafter unless a written notice of non-extension is provided at least six months in advance of termination. Voltaren® Gel royalties incurred during the six months ended June 30, 2016 and the year ended December 31, 2015 were $11.9 million and $30.0 million, respectively. Any payments related to the period after July 1, 2016, the effective date of the 2015 Voltaren® Gel Agreement, are recorded against the contingent consideration liability and changes in fair value are recorded in earnings (Refer to Note 7. Fair Value Measurements for further information).

Under the 2008 Voltaren® Gel Agreement, which was effective through June 30, 2016, the Group agreed (i) to make certain guaranteed minimum annual royalty payments beginning in the fourth year of the 2008 Voltaren® Gel Agreement (2008 Guaranteed Minimum Annual Royalty Payment), (ii) to expend a minimum amount of annual advertising and promotional expenses (A&P Expenditures) on the commercialization of Voltaren® Gel and (iii) to perform a minimum number of face-to-face discussions with physicians and other health care practitioners (Details), each subject to certain limitations set forth in the 2008 Voltaren® Gel Agreement, including the requirement that a third party generic equivalent product not be launched. Under the 2015 Voltaren® Gel Agreement, the Group agreed to make certain guaranteed minimum annual royalty payments (2015 Guaranteed Minimum Annual Royalty Payment) subject to certain limitations set forth in the 2015 Voltaren® Gel Agreement, including the requirement that a third party generic equivalent product is not launched. In March 2016, Amneal Pharmaceuticals LLC (Amneal) launched a generic equivalent of Voltaren® Gel and, therefore, the Group's obligations to make the 2008 Guaranteed Minimum Annual Royalty Payment, to expend A&P Expenditures and to perform Details for the remainder of the term of the 2008 Voltaren® Gel Agreement terminated as of the date of the launch of the generic equivalent product by Amneal. In addition, the Group's obligation to make the 2015 Guaranteed Minimum Annual Royalty Payment also terminated.

Strakan International Limited

In August 2009, we entered into a License and Supply Agreement with Strakan International Limited, a subsidiary of ProStrakan Group plc. (ProStrakan), which was subsequently acquired by Kyowa Hakko Kirin Co. Ltd., for the exclusive right to commercialize Fortesta® Gel in the U.S. (the ProStrakan Agreement). Fortesta® Gel is a patented 2% testosterone transdermal gel for testosterone replacement therapy in male hypogonadism. A metered dose delivery system permits accurate dose adjustment to increase the ability to individualize patient treatment.

The Group received FDA approval for Fortesta® Gel in December 2010, which triggered a one-time approval milestone to ProStrakan for $12.5 million. The approval milestone was recorded as an intangible asset and is being amortized into Cost of sales on a straight-line basis over its estimated useful life. An additional milestone payment of $5.0 million was triggered during the fourth quarter of 2015 pursuant to the terms of the ProStrakan Agreement. The milestone was recorded as an intangible asset and is being amortized into Cost of sales, ProStrakan could potentially receive up to approximately $150.0 million in additional payments linked to the achievement of future commercial milestones related to Fortesta® Gel.

ProStrakan will exclusively supply Fortesta® Gel to Endo at a supply price based on a percentage of annual net sales subject to a minimum floor price as defined in the ProStrakan Agreement. Endo may terminate the ProStrakan Agreement upon six months prior written notice at no cost to the Group.

Grünenthal GmbH

In December 2007, we entered into a License, Development and Supply Agreement (the Grünenthal Agreement) with Grünenthal for the exclusive clinical development and commercialization rights in Canada and the U.S. for an oral formulation of OPANA® ER, with INTAC® technology. In December 2011, the FDA approved a formulation of OPANA® ER with INTAC® technology, which is called OPANA® ER.

In the fourth quarter of 2011, the Group capitalized a one-time approval milestone to Grünenthal for $4.9 million. We are amortizing this intangible asset into Cost of sales over its estimated useful life. In the fourth quarter of 2013, the Group recorded an additional $10.4 million as Cost of sales related to a commercial milestone. Additional amounts of approximately €53.9 million (approximately $56.7 million at December 31, 2016) may become due upon achievement of additional future predetermined regulatory and commercial milestones. Endo will also make payments to Grünenthal based on net sales of any such product or products commercialized under this agreement, including the formulation of OPANA® ER approved by the FDA in December 2011.

Effective December 19, 2012, the Group and Grünenthal amended the Grünenthal Agreement whereby the Group became responsible for planning of packaging of finished product and certain other routine packaging quality obligations and Grünenthal agreed to reimburse the Group for the third-party costs incurred related to packaging as well as pay the Group a periodic packaging fee. The amendment also changed certain of the terms with respect to the floor price required to be paid by the Group in consideration for product supplied by Grünenthal. On February 18, 2014, the Group and Grünenthal amended the Grünenthal Agreement to define the responsibilities of the parties for certain additional clinical work to be performed for OPANA® ER.

BioSpecifics Technologies Corp.

The Group, through an affiliate, is party to a development and license agreement, as amended (the BioSpecifics Agreement) with BioSpecifics Technologies Corp. (BioSpecifics). The BioSpecifics Agreement was originally entered into in June 2004 to obtain exclusive worldwide rights to develop, market and sell certain products containing BioSpecifics' enzyme, which we refer to as XIAFLEX®. The Group's licensed rights concern the development and commercialization of products, other than dermal formulations labeled for topical administration, and currently, the Group's licensed rights cover the indications of Dupuytren's Contracture (DC), Dupuytren's Nodules, Peyronie's Disease (PD), Adhesive Capsulitis, cellulite, canine lipomas, Plantar Fibromatosis and Lateral Hip Fat. Auxilium may further expand the BioSpecifics Agreement, at its option, to cover other indications as they are developed by the Group or BioSpecifics.

Under the BioSpecifics Agreement, we are responsible, at our own cost and expense, for developing the formulation and finished dosage form of products and arranging for the clinical supply of products. BioSpecifics is currently conducting exploratory clinical trials evaluating XIAFLEX® as a treatment for a number of conditions, including lipomas in humans and uterine fibroids. The Group has the option to license development and marketing rights to these indications based on a full analysis of the data from the clinical trials, which would transfer responsibility for the future development costs to the Group and trigger opt-in payments and potential future milestone and royalty payments to BioSpecifics.

The BioSpecifics Agreement extends, on a country-by-country and product-by-product basis, for the longer of the patent life, the expiration of any regulatory exclusivity period or twelve years from the effective date. Either party may terminate the BioSpecifics Agreement as a result of the other party's breach or bankruptcy. We may terminate the BioSpecifics Agreement with 90 days' written notice.

We must pay BioSpecifics on a country-by-country and product-by-product basis a specified percentage within a range of 5% to 15% of net sales for products covered by the BioSpecifics Agreement. This royalty applies to net sales by the Group or its sublicensees, including Asahi Kasei Pharma Corporation (Asahi Kasei) and Swedish Orphan Biovitrum AB (Sobi). We are also obligated to pay a percentage of any future regulatory or commercial milestone payments received from such sublicensees. In addition, the Group and its affiliates pay BioSpecifics an amount equal to a specified mark-up on certain cost of goods related to supply of XIAFLEX® (which mark-up is capped at a specified percentage within the range of 5% to 15% of the cost of goods of XIAFLEX®) for products sold by the Group and its affiliates.

XIAFLEX® Out-license Agreements

We are party to certain out-licensing agreements with Asahi Kasei and Sobi (the XIAFLEX® Sublicensees), pursuant to which the XIAFLEX® Sublicensees have marketing, development and/or commercial rights for XIAFLEX® and XIAPEX® (the European Union trade name for XIAFLEX®) in a variety of countries outside of the U.S. The applicable royalty percentages related to these agreements increase from tier to tier upon the achievement of a specified threshold of aggregate annual net sales of the licensed product and may decrease if a generic is marketed in the applicable territory. Pursuant to each of these out-licensing agreements, the Group will be responsible for all clinical and commercial drug manufacturing and supply and, in certain cases, for development costs.

The Japanese Ministry of Health, Labour and Welfare approved XIAFLEX® for manufacturing and marketing in Japan on July 3, 2015 for the indication of Dupuytren's Contracture with a palpable cord and was subsequently listed on the Japanese National Health Insurance drug price standard on August 31, 2015. The Group's partner, Asahi Kasei Pharma Corporation, commercially launched the product in Japan in September 2015. Under the terms of the Asahi Kasei agreement, Endo received a $20.0 million gross milestone payment in October 2015 as a result of the first commercial sale of XIAFLEX® in Japan. The Group is recognizing the $20.0 million of milestone turnover on a straight-line basis over the remaining term of the license agreement.

We were party to an out-licensing agreement with Actelion Pharmaceuticals Ltd. (Actelion) to develop, supply and commercialize XIAFLEX® in Canada and Australia. On July 1, 2016, the parties mutually agreed to terminate the collaboration for Canada and agreed upon certain transition services to be provided by Actelion until approval of the transfer of the drug identification number by the regulatory authority in Canada to the Group. For Australia, the collaboration agreement remained in effect until a new agreement was finalized. In consideration for the rights returned to the Group by Actelion, Endo made a cash payment of $5.5 million in July 2016 to terminate the agreement and the transaction was treated as an asset acquisition. For Australia, we entered into a new out-licensing agreement with Actelion Pharmaceuticals Australia PTY in December 2016, pursuant to which Actelion obtained marketing and commercial rights for XIAFLEX® in Australia and New Zealand.

BioDelivery Sciences International, Inc.

The Group was party to a worldwide license and development agreement with BDSI for the exclusive rights to develop and commercialize BELBUCA™ (buprenorphine HCl) Buccal Film. The NDA for BELBUCA™ was submitted in December 2014 and accepted by the FDA in February 2015. On October 23, 2015, the FDA approved BELBUCA™ for the management of severe pain and BELBUCA™ became commercially available in the U.S. during February 2016. As a result of the FDA approval of BELBUCA™, the Group capitalized a one-time approval milestone payment to BioDelivery for $44.0 million in the fourth quarter of 2015.

In December 2016, Endo announced that it was returning BELBUCA™ to BDSI and this transaction closed on January 6, 2017. As a result of this announcement, the Group incurred restructuring and impairment charges during the fourth quarter of 2016 (Refer to Note 4. Restructuring for further information).

NOTE 12. DEBT

The following table presents the carrying amounts of the Group's total indebtedness at December 31, 2016 and 2015 (in thousands):

		December 31, 2016		December 31, 2015	
	Effective Interest Rate	Principal Amount	Carrying Amount	Principal Amount	Carrying Amount
7.25% Senior Notes due 2022	7.91%	$ 400,000	$ 389,150	$ 400,000	$ 387,465
5.75% Senior Notes due 2022	6.04%	700,000	691,339	700,000	689,912
5.375% Senior Notes due 2023	5.62%	750,000	740,733	750,000	739,489
6.00% Senior Notes due 2023	6.28%	1,635,000	1,610,280	1,635,000	1,607,306
6.00% Senior Notes due 2025	6.27%	1,200,000	1,179,203	1,200,000	1,177,287
Term Loan A Facility Due 2019	2.95%	941,875	932,824	1,017,500	1,003,669
Term Loan B Facility Due 2022	4.06%	2,772,000	2,728,919	2,800,000	2,750,100
Revolving Credit Facility	—	—	—	225,000	225,000
Other debt	1.50%	55	55	134	134
Total long-term debt, net		$ 8,398,930	$ 8,272,503	$ 8,727,634	$ 8,580,362
Less current portion, net		131,125	131,125	328,705	328,705
Total long-term debt, less current portion, net		$ 8,267,805	$ 8,141,378	$ 8,398,929	$ 8,251,657

The senior notes are unsecured and subordinated in right of payment to our credit facility.

The total fair value of the Group's total long-term debt at December 31, 2016 and 2015, was $7.8 billion and $8.6 billion, respectively.

The fair value of the Group's long-term debt is estimated using the quoted market prices for the same or similar debt issuances. Based on this valuation methodology, we determined these debt instruments represent Level 2 measurements within the fair value hierarchy.

Pursuant to the terms of the credit agreements and indentures governing our various debt instruments, certain subsidiaries of Endo International plc, known as restricted subsidiaries, are subject to various restrictions limiting their ability to transfer funds to Endo International plc. As of December 31, 2016, net assets of our restricted subsidiaries comprised more than 95% of the Group's consolidated total net assets, after intercompany eliminations.

Credit Facility

Upon closing of the Paladin acquisition on February 28, 2014, certain subsidiaries of the Group entered into a credit agreement (the 2014 Credit Agreement) with Deutsche Bank AG New York Branch, as administrative agent, collateral agent, issuing bank and swingline lender and certain other lenders, which provided for a five-year senior secured term loan A facility in an aggregate principal amount of $1.1 billion (the 2014 Term Loan A Facility), a seven-year senior secured term loan B facility in an aggregate principal amount of $425.0 million (the 2014 Term Loan B Facility), and a five-year revolving credit facility in an aggregate principal amount of $750.0 million (the 2014 Revolving Credit Facility). The 2014 Credit Agreement was entered into to refinance certain of our existing indebtedness, including our prior credit facility, and for general corporate purposes, including acquisitions.

In June 2015, certain subsidiaries of the Group entered into Amendment No. 1 to Credit Agreement (Amendment No. 1), with Deutsche Bank and certain other lenders, pursuant to which we amended the 2014 Credit Agreement to, among other things, (i) permit the acquisition by Endo Designated Activity Company, formerly known as Endo Limited (Endo DAC) or its affiliates of Par and (ii) permit an incremental revolving facility in an aggregate principal amount of $250.0 million (the Incremental Revolving Facility), and one or more incremental term B loan facilities in an aggregate principal amount up to $5.0 billion, in each case, in connection with the Par acquisition. Loans incurred under the 2014 Term Loan A Facility, the 2014 Term Loan B Facility and the Incremental Term Loan B Facility (as defined below) are recorded net of the unamortized portion of the original purchaser's discount. This discount is amortized to interest expense over the term of the Amended Credit Agreement (as defined below).

Simultaneously with the closing of the Par acquisition, on September 25, 2015, we entered into the Incremental Amendment to Credit Agreement, with Deutsche Bank and certain other lenders (the Incremental Amendment), pursuant to which we (i) increased our revolving capacity to $1.0 billion pursuant to the Incremental Revolving Facility (ii) incurred an incremental term loan B facility (the Incremental Term Loan B Facility) in an aggregate principal amount of $2.8 billion (together with the Incremental Revolving Facility, the Par Incremental Facilities) and (iii) repaid in full the amount outstanding under the 2014 Term Loan B Facility. We refer to the 2014 Credit Agreement, as amended by Amendment No. 1 and the Incremental Amendment, and as further amended, restated, supplemented or otherwise modified, as the Amended Credit Agreement.

Borrowings under our revolving credit facilities and our Term Loan A facility bear interest at a rate equal to an applicable margin plus London Interbank Offered Rate (LIBOR). In addition, borrowings under our Term Loan B facility bear interest at a rate equal to an applicable margin plus LIBOR, subject to a LIBOR floor of 0.75%.

We have $997.4 million of remaining credit available through the revolving credit facilities as of December 31, 2016.

In January 2017, certain subsidiaries of the Group entered into Amendment No. 2 to the Credit Agreement (Amendment No. 2), with Deutsche Bank and certain other lenders, pursuant to which we amended the 2014 Credit Agreement to clarify certain definitions of Excess Cash Flow and Excess Cash Payment Date.

In addition to the Incremental Revolving Facility and the Incremental Term Loan B Facility, the Amended Credit Agreement also permits us to obtain (i) incremental revolving and/or term loan commitments of $1.0 billion plus (ii) an unlimited amount of incremental revolving and/or term loan commitments if the Secured Leverage Ratio (as defined in the Amended Credit Agreement), at the time of incurrence of such incremental commitments and after giving effect thereto on a pro forma basis, is less than or equal to 3.00 to 1.00 (assuming for purposes of such calculation that any incremental revolving commitments incurred at the time of such calculation are fully drawn and without netting cash proceeds of any incremental facilities or, in lieu of loans under any incremental facilities, pari passu or junior secured or unsecured notes or junior secured term loans) from one or more of the existing lenders (or their affiliates) or other lenders (with the consent of the administrative agent) and, subject to compliance by the borrowers with the documentation and other requirements under the Amended Credit Agreement, without the need for consent from any of the existing lenders under the Amended Credit Agreement (other than those existing lenders that have agreed to provide such incremental facilities).

The Amended Credit Agreement contains affirmative and negative covenants that the Group believes to be usual and customary for a senior secured credit facility. The negative covenants include, among other things, limitations on capital expenditures, asset sales, mergers and acquisitions, indebtedness, liens, dividends, investments and transactions with the Group's affiliates. As of December 31, 2016, we were in compliance with all such covenants. In addition, on an annual basis commencing with the year ended December 31, 2016, the Group is required to perform a calculation of excess cash flow (as defined in the Amended Credit Agreement), which may result in an accelerated payment of the principal amount. The excess cash flow calculation for the year ended December 31, 2016 did not result in an excess payment.

Maturities

Maturities on long-term debt for each of the next five years as of December 31, 2016 are as follows (in thousands):

	December 31, 2016
Wholly repayable within five years:	
2017	$ 131,125
2018	$ 179,250
2019	$ 715,500
2020	$ 28,000
2021	$ 28,000
Not wholly repayable within five years	$ 7,317,055

NOTE 13. COMMITMENTS AND CONTINGENCIES

Manufacturing, Supply and Other Service Agreements

Our subsidiaries contract with various third party manufacturers, suppliers and service providers to provide raw materials used in our subsidiaries' products and semi-finished and finished goods, as well as certain packaging, labeling services, customer service support, warehouse and distribution services. These contracts include agreements with Novartis, Teikoku, Noramco, Grünenthal and JHS, among others. If, for any reason, we are unable to obtain sufficient quantities of any of the finished goods or raw materials or components required for our products or services needed to conduct our business, it could have an adverse effect on our business, financial condition, results of operations and cash flows.

In addition to the manufacturing and supply agreements described above, we have agreements with various companies for clinical development services. Although we have no reason to believe that the parties to these agreements will not meet their obligations, failure by any of these third parties to honor their contractual obligations may have a material adverse effect on our business, financial condition, results of operations and cash flows.

Novartis License and Supply Agreement

See Note 11. License and Collaboration Agreements for a description of the Group's commitments and contingencies under the 2008 and 2015 Voltaren® Gel Agreements.

Teikoku Seiyaku Co., Ltd.

Under the terms of the Group's agreement (the Teikoku Agreement) with Teikoku, a Japanese manufacturer, Teikoku manufactures Lidoderm® at its two Japanese facilities, located on adjacent properties, for commercial sale by the Group in the U.S. The Group also has an option to extend the supply area to other territories. The Group amended the Teikoku Agreement on April 24, 2007, January 6, 2010, November 1, 2010 and February 25, 2015 (together, the Amended Agreement). The material components of the Amended Agreement are as follows:

- The Group agreed to issue firm purchase orders for a minimum number of patches per year through 2017, representing the noncancelable portion of the Amended Agreement. There is a lower minimum purchase requirement in effect subsequent to 2017. The Group has met its minimum purchase requirement for 2016.
- Teikoku agreed to fix the supply price of Lidoderm® for a period of time after which the price will be adjusted at future certain dates based on a price index defined in the Amended Agreement.
- Following cessation of the Group's obligation to pay royalties to Hind Healthcare Inc. (Hind) under the Sole and Exclusive License Agreement dated as of November 23, 1998, as amended, between Hind and the Group (the Hind Agreement), the Group began to pay to Teikoku annual royalties based on annual net sales of Lidoderm®.
- The Amended Agreement will not expire until December 31, 2021, unless terminated in accordance with its terms. After December 31, 2021, the Amended Agreement shall be automatically renewed on the first day of January each year unless terminated in accordance with its terms.

- Either party may terminate the Amended Agreement, following a 45-day cure period, in the event that the Group fails to issue firm purchase orders for the annual minimum quantity for each year after 2017.
- The Group is the exclusive licensee for any authorized generic for Lidoderm® until the later of August 15, 2017 or the date of the first commercial sale of the second non-Teikoku generic version of Lidoderm®.

Amounts purchased pursuant to the Teikoku Agreement, as amended, were $37.5 million and $48.3 million for the years ended December 31, 2016 and 2015, respectively.

On November 23, 2011, the Group's obligation to pay royalties to Hind under the Hind Agreement ceased. Accordingly, on November 23, 2011, pursuant to the terms of the Teikoku Agreement, the Group began to incur royalties to Teikoku based on annual net sales of Lidoderm®. The royalty rate is 6% of branded Lidoderm® net sales. Additionally, in May 2014, we launched an authorized generic lidocaine patch 5% (referred to as Lidoderm® authorized generic) and began to incur royalties on net sales of the authorized generic. During the years ended December 31, 2016 and 2015, we recorded $16.5 million and $17.8 million for these royalties to Teikoku, respectively. These amounts were included in our Consolidated Profit and Loss Account as Cost of sales. At December 31, 2016, $12.2 million is recorded as a royalty payable and included in Accounts payable and accrued expenses in the accompanying Consolidated Balance Sheets.

Noramco, Inc.

Under the terms of our agreement (the Noramco Agreement) with Noramco, Noramco manufactures and supplies to us certain narcotic active drug substances, in bulk form, for inclusion in our controlled substance pharmaceutical products. There are no minimum annual purchase commitments under the Noramco Agreement; however, we are required to purchase from Noramco a fixed percentage of our annual requirements of each narcotic active drug substance covered by the Noramco Agreement. The purchase price for these substances is equal to a fixed amount, adjusted on an annual basis based on volume. In July 2016, the Group sent a notice of non-renewal to Noramco which will result in the agreement being terminated as of April 2017. The Group is not subject to any penalties as a result of this termination.

Pursuant to the terms of the Noramco Agreement, the Group made payments to Noramco during the years ended December 31, 2016 and 2015 totaling $48.8 million and $42.0 million, respectively. These payments are recorded in Cost of sales in our Consolidated Profit and Loss Account.

Grünenthal GmbH

Pursuant to the terms of the Group's December 2007 License, Development and Supply Agreement with Grünenthal (the Grünenthal Agreement), Grünenthal agreed to manufacture and supply to the Group a formulation of OPANA® ER with INTAC® technology based on a supply price equal to a certain percentage of net sales of OPANA® ER, subject to a floor price. In the first quarter of 2012, we began production of the formulation of OPANA® ER with INTAC® technology at a third party manufacturing facility managed by Grünenthal. The Grünenthal Agreement will expire on the later of (i) the 15th anniversary of the date of first commercial sale of the product, (ii) the expiration of the last issued patent in the territory claiming or covering products or (iii) the expiration of exclusivity granted by the FDA for the last product developed under the Grünenthal Agreement. Either party may terminate the Grünenthal Agreement in certain circumstances upon providing sufficient written notice to the other party. Effective December 19, 2012, the Group and Grünenthal amended the Grünenthal Agreement whereby the Group became responsible for the planning of packaging of finished product and certain other routine packaging quality obligations and Grünenthal agreed to reimburse the Group for the third-party costs incurred related to packaging as well as pay the Group a periodic packaging fee. The amendment also changed certain of the terms with respect to the floor price required to be paid by the Group in consideration for product supplied by Grünenthal. On February 18, 2014, the Group and Grünenthal amended the Grünenthal Agreement to define the responsibilities of the parties for certain additional clinical work to be performed for OPANA® ER.

The Group's supply payments made to Grünenthal pursuant to the Grünenthal Agreement are recorded in Cost of sales in our Consolidated Profit and Loss Account and must be paid in U.S. dollars within 45 days after each calendar quarter. We incurred $25.5 million and $28.5 million for the years ended December 31, 2016 and 2015, respectively.

Jubilant HollisterStier Laboratories LLC (JHS)

During the second quarter of 2016, we entered into a new agreement with JHS (JHS Agreement). Pursuant to the JHS Agreement, JHS fills and lyophilizes the XIAFLEX® bulk drug substance, which is manufactured by the Group, and produces sterile diluent. The initial term of the JHS agreement is three years, with automatic renewal provisions thereafter for subsequent one-year terms, unless or until either party provides notification prior to expiration of the then current term of the contract. The Group is required to purchase a specified percentage of its total forecasted volume of XIAFLEX® from JHS each year, unless JHS is unable to supply XIAFLEX® within the timeframe established under such forecasts. Amounts purchased pursuant to the JHS Agreement were $6.3 million for the year ended December 31, 2016. Amounts purchased in 2015 were not material.

Milestones and Royalties

See Note 11. License and Collaboration Agreements for a description of future milestone and royalty commitments pursuant to our acquisitions, license and collaboration agreements.

Legal Proceedings and Investigations

We and certain of our subsidiaries are involved in various claims, legal proceedings, internal and governmental investigations (collectively, proceedings) that arise from time to time in the ordinary course of our business, including, among others, those relating to product liability, intellectual property, regulatory compliance and commercial matters. While we cannot predict the outcome of these proceedings and we intend to defend vigorously our position, an adverse outcome in any of these proceedings could have a material adverse effect on our current and future financial position, results of operations and cash flows. Matters that are not being disclosed herein are, in the opinion of our management, immaterial both individually and in the aggregate with respect to our financial position, results of operations and cash flows. If and when such matters, in the opinion of our management, become material either individually or in the aggregate, we will disclose such matters.

As of December 31, 2016, our reserve for loss contingencies totaled $1,015.9 million, of which $963.1 million relates to our product liability accrual for vaginal mesh cases. Although we believe there is a reasonable possibility that a loss in excess of the amount recognized exists, we are unable to estimate the possible loss or range of loss in excess of the amount recognized at this time.

Product Liability

We and certain of our subsidiaries have been named as defendants in numerous lawsuits in various U.S. federal and state courts, as well as in Canada and other countries, alleging personal injury resulting from the use of certain products of our subsidiaries. These matters are described below in more detail.

We believe that certain settlements and judgments, as well as legal defense costs, relating to certain product liability matters are or may be covered in whole or in part under our product liability insurance policies with a number of insurance carriers. In certain circumstances, insurance carriers reserve their rights to contest or deny coverage. We intend to contest vigorously any and all such disputes with our insurance carriers and to enforce our rights under the terms of our insurance policies. Accordingly, we will record receivables with respect to amounts due under these policies only when the resolution of any dispute has been reached and realization of the potential claim for recovery is considered probable. Amounts recovered under our product liability insurance policies will likely be less than the stated coverage limits and may not be adequate to cover damages and/or costs relating to claims. In addition, there is no guarantee that insurers will pay claims or that coverage will otherwise be available.

Vaginal Mesh Cases. In October 2008, the FDA issued a Public Health Notification (October 2008 Public Health Notification) regarding potential complications associated with transvaginal placement of surgical mesh to treat pelvic organ prolapse (POP) and stress urinary incontinence (SUI). The notification provided recommendations and encouraged physicians to seek specialized training in mesh procedures, to advise their patients about the risks associated with these procedures and to be diligent in diagnosing and reporting complications.

In July 2011, the FDA issued an update to the October 2008 Public Health Notification regarding mesh to further advise the public and the medical community of the potential complications associated with transvaginal placement of surgical mesh to treat POP and SUI. In the July 2011 update, the FDA stated that adverse events are not rare. Furthermore, the FDA questioned the relative effectiveness of transvaginal mesh as a treatment for POP as compared to non-mesh surgical repair. The July 2011 notification continued to encourage physicians to seek specialized training in mesh procedures, to consider and to advise their patients about the risks associated with these procedures and to be diligent in diagnosing and reporting complications. In January 2016, the FDA issued a statement reclassifying surgical mesh for transvaginal POP repair from Class II to Class III. Surgical mesh for SUI repair remains a Class II device.

In January 2012, the FDA ordered manufacturers of transvaginal surgical mesh used for POP and of single incision mini-slings for urinary incontinence, such as our AMS subsidiary, to conduct post-market safety studies and to monitor adverse event rates relating to the use of these products. The FDA agreed to place 16 AMS study orders on hold for a variety of reasons. AMS commenced three of these post-market study orders. However, due to the wind-down of the Astora business in 2016, AMS notified the FDA of its termination of these studies and the FDA has confirmed closure of those studies.

Since 2008, we and certain of our subsidiaries, including AMS and/or Astora, have been named as defendants in multiple lawsuits in the U.S. in various state and federal courts, including a multidistrict litigation (MDL) in the U.S. District Court for the Southern District of West Virginia (MDL No. 2325), in Canada, where various class action and individual complaints are pending, and in other countries alleging personal injury resulting from the use of transvaginal surgical mesh products designed to treat POP and SUI. Plaintiffs in these suits allege various personal injuries including chronic pain, incontinence and inability to control bowel function and permanent deformities, and seek compensatory and punitive damages, where available.

We and certain plaintiffs' counsel representing mesh-related product liability claimants have entered into various Master Settlement Agreements (MSAs) and other settlement agreements regarding settling up to approximately 49,000 filed and unfiled mesh claims handled or controlled by the participating counsel for an aggregate total of approximately $2.8 billion. These MSAs, which were executed at various times since June 2013, were entered into solely by way of compromise and settlement and are not in any way an admission of liability or fault by us or any of our subsidiaries. All MSAs are subject to a process that includes guidelines and procedures for administering the settlements and the release of funds. In certain cases, the MSAs provide for the creation of QSFs into which funds may be deposited pursuant to certain schedules set forth in those agreements. All MSAs have participation thresholds regarding the claims represented by each law firm party to the MSA. If certain participation thresholds are not met, then we will have the right to terminate the settlement with that law firm. In addition, one agreement gives us a unilateral right of approval regarding which claims may be eligible to participate under that settlement. To the extent fewer claims than are authorized under an agreement participate, the total settlement payment under that agreement will be reduced by an agreed-upon amount for each such non-participating claim. Funds deposited in QSFs are included in restricted cash at bank and in-hand in the Consolidated Balance Sheets.

Distribution of funds to any individual claimant is conditioned upon the receipt of documentation substantiating the validity of the claim, a full release and a dismissal of the entire action or claim as to all AMS parties and affiliates. Prior to receiving funds, an individual claimant is required to represent and warrant that liens, assignment rights or other claims identified in the claims administration process have been or will be satisfied by the individual claimant. Confidentiality provisions apply to the amount of settlement awards to participating claimants, the claims evaluation process and procedures used in conjunction with award distributions, and the negotiations leading to the settlements.

We expect that valid claims under the MSAs will continue to be settled. However, we intend to vigorously contest pending and future claims that are invalid, for which settlement is unable to be reached or that are in excess of the maximum claim amounts under the applicable MSAs. In addition to claims covered by MSAs, we are currently aware of approximately 10,500 claims that have been filed, asserted or that we believe are likely to be asserted. These claims have not been accrued for because we lack sufficient information to determine whether any potential loss is probable. In addition, there may be other claims asserted in the future. It is currently not possible to estimate the number or validity of any such future claims.

In order to evaluate whether a claim is probable of a loss, we must obtain and evaluate certain information pertaining to each individual claim, including but not limited to the following items: the name and social security number of the plaintiff, evidence of an AMS implant, the date of implant, the date the claim was first asserted to AMS and medical records establishing the injury alleged. Without access to and review of at least this information and the opportunity to evaluate it, we are not in a position to determine a claim's validity or whether a loss is probable. Further, the timing and extent to which we obtain this information and our evaluation thereof, is often impacted by items outside of our control, including, without limitation, the normal cadence of the litigation process and the provision of claim information to us by plaintiff's counsel.

We will continue to monitor the situation, and, if appropriate, we will make further adjustments to our product liability accrual based on new information. We intend to continue exploring all options as appropriate in our best interests, and depending on developments, there is a possibility that we will suffer adverse decisions or verdicts of substantial amounts, or that we will enter into additional monetary settlements. Any unfavorable outcomes as a result of such litigation or settlements with respect to any asserted or unasserted claims could have a material adverse effect on our business, financial condition, results of operations and cash flows.

As of the date of this report, we believe that the current product liability accrual includes all known claims for which liability is probable.

The following table presents the changes in the vaginal mesh QSFs and product liability accrual balance during the year ended December 31, 2016 (in thousands):

	Qualified Settlement Funds	Product Liability Accrual
Balance as of December 31, 2015	$ 578,970	$ 2,086,176
Additional charges	—	19,505
Cash contributions to Qualified Settlement Funds	831,131	—
Cash distributions to settle disputes from Qualified Settlement Funds	(1,134,734)	(1,134,734)
Cash distributions to settle disputes	—	(7,830)
Other	620	—
Balance as of December 31, 2016	$ 275,987	$ 963,117

The entire portion of the $963.1 million product liability accrual amount shown above is classified in the Current portion of the legal settlement accrual in the December 31, 2016 Consolidated Balance Sheets. Charges related to vaginal mesh product liability for all periods presented are reported in Discontinued operations, net of tax in our Consolidated Profit and Loss Account.

We expect to fund the payments under all current settlement agreements over the course of 2017. As the funds are disbursed out of the QSFs from time to time, the product liability accrual will be reduced accordingly with a corresponding reduction to restricted cash at bank and in-hand. In addition, we may pay cash distributions to settle disputes separate from the QSFs, which will also decrease the product liability accrual and decrease cash at bank and in-hand.

We were contacted in October 2012 regarding a civil investigation initiated by a number of state attorneys general into mesh products, including transvaginal surgical mesh products designed to treat POP and SUI. In November 2013, we received a subpoena relating to this investigation from the state of California, and we have subsequently received additional subpoenas from California and other states. We are currently cooperating with this investigation. At this time, we cannot predict or determine the outcome of this investigation or reasonably estimate the amount or range of amounts of fines or penalties, if any, that might result from a settlement or an adverse outcome from this investigation.

Testosterone Cases. We and certain of our subsidiaries, including Endo Pharmaceuticals Inc. (EPI) and Auxilium Pharmaceuticals, Inc. (subsequently converted to Auxilium Pharmaceuticals, LLC and hereinafter referred to as Auxilium), along with other pharmaceutical manufacturers, have been named as defendants in lawsuits alleging personal injury resulting from the use of prescription medications containing testosterone, including Fortesta® Gel, Delatestryl®, Testim®, TESTOPEL®, Aveed® and Striant®. Plaintiffs in these suits allege various personal injuries, including pulmonary embolism, stroke and other vascular and/or cardiac injuries and seek compensatory and/or punitive damages, where available. In June 2014, an MDL was formed to include claims involving all testosterone replacement therapies filed against EPI, Auxilium, and other manufacturers of such products, and certain transferable cases pending in federal court were coordinated in the U.S. District Court for the Northern District of Illinois as part of MDL No. 2545. In addition, litigation has also been filed against EPI in the Court of Common Pleas for Philadelphia County and in certain other state courts. Litigation similar to that described above may also be brought by other plaintiffs in various jurisdictions, and we expect cases brought in federal court to be transferred to the U.S. District Court for the Northern District of Illinois as tag-along actions to MDL No. 2545. However, we cannot predict the timing or outcome of any such litigation, or whether any such additional litigation will be brought against us. We intend to contest the litigation vigorously and to explore all options as appropriate in our best interests. As of March 31, 2017, approximately 1,250 cases are currently pending against us; some of which may have been filed on behalf of multiple plaintiffs. The first MDL trial against Auxilium involving Testim® is set to begin in November 2017, the first trial against Auxilium in the Court of Common Pleas for Philadelphia County involving Testim® is set to begin in January 2018; and the first MDL trial against EPI involving Fortesta® is set to begin in September 2018.

In November 2015, the U.S. District Court for the Northern District of Illinois entered an order granting defendants' motion to dismiss claims involving certain testosterone products that were approved pursuant to ANDAs, including TESTOPEL®. Plaintiffs filed a motion for reconsideration and clarification of this order. In March 2016, the District Court granted plaintiffs' motion in part and entered an order permitting certain claims to go forward to the extent they are based on allegations of fraudulent off-label marketing.

In November 2014, a civil class action complaint was filed in the U.S. District for the Northern District of Illinois against EPI, Auxilium, and various other manufacturers of testosterone products on behalf of a proposed class of health insurance companies and other third party payors that had paid for certain testosterone products, alleging that the marketing efforts of EPI, Auxilium, and other defendant manufacturers with respect to certain testosterone products constituted racketeering activity in violation of 18 U.S.C. §1962(c), and other civil Racketeer Influenced and Corrupt Organizations Act claims. Further, the complaint alleged that EPI, Auxilium, and other defendant manufacturers violated various state consumer protection laws through their marketing of certain testosterone products and raised other state law claims. In March 2015, defendants filed a motion to dismiss the complaint and plaintiffs responded by filing amended complaints, which defendants also moved to dismiss. In February 2016, the District Court granted in part and denied in part defendants' motion to dismiss. The District Court declined to dismiss plaintiffs' claims for conspiracy to commit racketeering activity in violation of 18 U.S.C. §1962(d) and claims for negligent misrepresentation. In April 2016, plaintiffs filed a third amended complaint, which defendants moved to dismiss in June 2016. In August 2016, the court denied the motion to dismiss and we filed a response to the third amended complaint in September 2016. In October 2015, a similar civil class action complaint was filed against EPI and other defendant manufacturers in the U.S. District for the Northern District of Illinois. Similar litigation may be brought by other plaintiffs. We are unable to predict the outcome of this matter or the ultimate legal and financial liability, if any, and at this time cannot reasonably estimate the possible loss or range of loss for this matter, if any, but we intend to contest this litigation vigorously and will explore all options as appropriate in our best interests.

Unapproved Drug Litigation

In September 2013, the State of Louisiana filed a petition for damages against certain of our subsidiaries, EPI and Generics Bidco I, LLC, and over 50 other pharmaceutical companies alleging the defendants or their subsidiaries marketed products that were not approved by the FDA. See *State of Louisiana v. Abbott Laboratories, Inc., et al*., C624522 (19th Jud. Dist. La.). The State of Louisiana sought damages, fines, penalties, attorneys' fees and costs under various causes of action. In October 2015, the District Court ordered judgment for defendants on their exception for no right of action. The State of Louisiana appealed that decision and in October 2016, the Louisiana Court of Appeals, First Circuit, issued a decision affirming the dismissal as to certain counts and reversing the dismissal as to others. The State filed a petition for rehearing, which was denied by the court in December 2016. Both sides applied to Louisiana Supreme Court for a writ of certiorari to review the First Circuit's decision. Those writs were denied in March 2017.

In March 2017, the State of Mississippi filed a complaint against our subsidiary EPI in the Chancery Court for the First Judicial District of Hinds County, Mississippi, alleging that EPI marketed products that were not approved by the FDA. The State of Mississippi seeks damages, penalties, attorneys' fees, costs, and other relief under various causes of action. In April 2017, EPI removed this case to the U.S. District Court for the Southern District of Mississippi. See *State of Mississippi v. Endo Pharmaceuticals Inc.*, No. 3:17-CV-277 (S.D. Miss.).

We intend to contest the above cases vigorously and to explore other options as appropriate in our best interests. Litigation similar to that described above may also be brought by other plaintiffs in various jurisdictions. However, we cannot predict the timing or outcome of any such litigation, or whether any such litigation will be brought against us. We are unable to predict the outcome of this matter or the ultimate legal and financial liability, if any, and at this time cannot reasonably estimate the possible loss or range of loss for this matter, if any.

Opioid-Related Litigations, Subpoenas and Document Requests

In June 2014, Corporation Counsel for the City of Chicago filed suit in Illinois state court against multiple defendants, including our subsidiaries Endo Health Solutions Inc. (EHSI) and EPI, for alleged violations of city ordinances and other laws relating to defendants' alleged opioid sales and marketing practices. In June 2014, the case was removed to the U.S. District Court for the Northern District of Illinois. In December 2014, defendants moved to dismiss the amended complaint and in May 2015, the District Court issued an order granting that motion in part, dismissing the case as to EHSI and EPI. In August 2015, plaintiff filed its second amended complaint against multiple defendants, including EPI and EHSI. In November 2015, defendants moved to dismiss the second amended complaint. In September 2016, the District Court granted in part and denied in part defendants' motions to dismiss and provided plaintiff an opportunity to amend its complaint. Plaintiff filed the third amended complaint in October 2016. In December 2016, defendants moved to dismiss the re-pled claims in the third amended complaint, and filed their answers as to the claims not previously dismissed by the Court.

In May 2014, a lawsuit was filed in California Superior Court (Orange County) in the name of the People of the State of California, acting by and through County Counsel for Santa Clara County and the Orange County District Attorney, against multiple defendants, including our subsidiaries EHSI and EPI (with EPI being added as part of the first amended complaint in June 2014). The complaint asserts violations of California's statutory Unfair Competition and False Advertising laws, as well as asserting a claim for public nuisance, based on alleged misrepresentations in connection with sales and marketing of opioids, including OPANA®. Plaintiff seeks declaratory relief, restitution, civil penalties (including treble damages), abatement, an injunction, and attorneys' fees and costs. Defendants, which include our subsidiaries, filed various motions attacking the pleadings, including one requesting that the Superior Court refrain from proceeding under the doctrines of primary jurisdiction and equitable abstention. That motion was granted in August 2015, and the case was stayed pending further proceedings and findings by the FDA. In June 2016, plaintiffs filed a motion to lift the stay and to amend the complaint. Defendants, including EHSI and EPI, opposed that motion. Following a hearing in July 2016, the court provided plaintiffs an opportunity to seek leave to file another amended complaint. In August 2016, plaintiffs filed a renewed motion to lift the stay and amend the complaint. In October 2016, the court granted, in part, plaintiffs' renewed motion to lift the stay and the plaintiffs filed their third amended complaint. Defendants' response to the third amended complaint is not due at this time.

In December 2015, a lawsuit was filed in the Chancery Court of the First Judicial District of Hinds County, Mississippi by the State of Mississippi against multiple defendants, including our subsidiaries EHSI and EPI. The complaint alleges violations of Mississippi's Consumer Protection Act and various other claims arising out of defendants' alleged opioid sales and marketing practices. Plaintiff seeks declaratory relief, restitution, civil penalties, abatement, an injunction, and attorneys' fees and costs. In March 2016, defendants moved to dismiss the complaint and to transfer the case from Hinds County to Rankin County. The motion to transfer was denied in February 2017. In March 2017, Defendants petitioned for an interlocutory appeal of that ruling, and that petition remains pending. The motion to dismiss also remains pending.

In August 2016, the County of Suffolk, New York filed suit in New York state court against multiple defendants, including our subsidiaries EHSI and EPI, for alleged violations of state false and deceptive advertising and other statutes, public nuisance, common law fraud, and unjust enrichment based on opioid sales and marketing practices. The County of Suffolk is seeking compensatory damages, interest, costs, disbursements, punitive damages, treble damages, penalties and attorneys' fees. Defendants, including our subsidiaries, filed motions to dismiss and to stay in January 2017. In February 2017, Broome County, New York, and Erie County, New York, filed similar suits in New York state court.

In March 2017, the Boone County Commission filed suit in the U.S. District Court for the Southern District of West Virginia against multiple defendants, including our subsidiary Generics Bidco I, LLC, for the alleged violation of federal and state safety laws designed to monitor, detect, and prevent the diversion of controlled substances. The complaint generally seeks compensatory and punitive damages for the alleged creation of a public nuisance.

With respect to the litigations brought on behalf of the City of Chicago, the People of the State of California, the State of Mississippi, the Counties of Suffolk, Broome and Erie and the Boone County Commission, we intend to contest those matters vigorously. We are unable to predict the outcome of these matters or the ultimate legal and financial liability, if any, and at this time cannot reasonably estimate the possible loss or range of loss, if any, for these matters but will explore all options as appropriate in our best interests.

In September 2014, our subsidiaries EHSI and EPI received a Request for Information from the State of Tennessee Office of the Attorney General and Reporter seeking documents and information regarding the sales and marketing of opioids, including OPANA® ER. We are currently cooperating with the State of Tennessee Office of the Attorney General and Reporter in this investigation.

In August 2015, our subsidiaries EHSI and EPI received a subpoena from the State of New Hampshire Office of the Attorney General seeking documents and information regarding the sales and marketing of opioids, including OPANA® ER. We were cooperating with the State of New Hampshire Office of the Attorney General in its investigation until we learned it was being assisted by outside counsel hired on a contingent fee basis. The New Hampshire Attorney General initiated an action in the Superior Court for the State of New Hampshire to enforce the subpoena despite this contingent fee arrangement, and we (along with other companies that had received similar subpoenas) responded by filing a motion for protective order to preclude the use of contingent fee counsel. In addition, we filed a separate motion seeking declaratory relief. In March 2016, the Superior Court granted the motion for protective order on the grounds that the contingent fee agreement was invalid as *ultra vires* and that the office of the Attorney General had acted outside of its statutory authority in entering into the agreement with the contingent fee counsel. In April 2016, both the New Hampshire Attorney General and the companies that received subpoenas from the New Hampshire Attorney General, including EHSI and EPI, appealed, in part, the March 2016 Superior Court order to the New Hampshire Supreme Court. Those appeals are pending. In April 2016, the New Hampshire Attorney General also entered into a new agreement with outside counsel. In response, the companies that received a subpoena from the New Hampshire Attorney General, including EHSI and EPI, moved to enforce a part of the protective order issued by the Superior Court in March 2016 that is not being appealed by EHSI and EPI. That motion was denied in August 2016.

In April 2016, EHSI and EPI received a Civil Investigative Demand (CID) from the Department of Justice (DOJ) for the State of Oregon seeking documents and information regarding the sales and marketing of OPANA® ER. We are currently cooperating with the State of Oregon in its investigation.

In November 2016, Endo International plc and EPI received an Administrative Subpoena from the Office of the Attorney General of Maryland seeking documents and information regarding the sales and marketing of opioid products. We are currently cooperating with the State of Maryland in its investigation.

In March 2017, EPI received a subpoena from the Office of the Attorney General of New Jersey seeking documents and information regarding the sales and marketing of opioid products. We are currently cooperating with the State of New Jersey in its investigation.

Antitrust Litigation and Investigations

Multiple direct and indirect purchasers of Lidoderm® have filed a number of cases against our subsidiary EPI and co-defendants Teikoku Seiyaku Co., Ltd., Teikoku Pharma USA, Inc. (collectively, Teikoku) and Actavis plc and certain of its subsidiaries (collectively, Actavis), which was subsequently acquired by Teva Pharmaceuticals Industries Ltd and its subsidiaries (collectively, Teva) from Allergan plc (Allergan). Certain of these actions have been asserted on behalf of classes of direct and indirect purchasers, while others are individual cases brought by one or more alleged direct or indirect purchasers. The complaints in these cases generally allege that EPI, Teikoku and Actavis entered into an anticompetitive conspiracy to restrain trade through the settlement of patent infringement litigation concerning U.S. Patent No. 5,827,529 (the '529 patent) and other patents. Some of the complaints also allege that Teikoku wrongfully listed the '529 patent in the Orange Book as related to Lidoderm®, that EPI and Teikoku commenced sham patent litigation against Actavis and that EPI abused the FDA citizen petition process by filing a citizen petition and amendments solely to interfere with generic companies' efforts to obtain FDA approval of their versions of Lidoderm®. The cases allege violations of Sections 1 and 2 of the Sherman Act (15 U.S.C. §§ 1, 2) and various state antitrust and consumer protection statutes as well as common law remedies in some states. These cases generally seek damages, treble damages, disgorgement of profits, restitution, injunctive relief and attorneys' fees.

The U.S. Judicial Panel on Multidistrict Litigation, pursuant to 28 U.S.C. § 1407, issued an order in April 2014 transferring these cases as *In Re Lidoderm Antitrust Litigation*, MDL No. 2521, to the U.S. District Court for the Northern District of California. The court granted plaintiffs' motions for class certification filed on behalf of classes of direct and indirect purchasers in February 2017. Trial is currently scheduled to begin in late 2017. We cannot predict whether or not additional cases similar to those described above will be filed by other plaintiffs or the timing or outcome of any such litigation. We expect any such cases brought in federal court to be transferred to the Northern District of California as tag-along actions to *In Re Lidoderm Antitrust Litigation*.

Multiple direct and indirect purchasers of OPANA® ER have filed cases against our subsidiaries EHSI and EPI, and other pharmaceutical companies, including Penwest Pharmaceuticals Co., which we subsequently acquired, and Impax Laboratories Inc. (Impax), all of which have been transferred and coordinated for pretrial proceedings in the U.S. District Court for the Northern District of Illinois by the Judicial Panel on Multidistrict Litigation. Some of these cases have been filed on behalf of putative classes of direct and indirect purchasers, while others have been filed on behalf of individual retailers or health care benefit plans. These cases generally allege that the agreement reached by EPI and Impax to settle patent infringement litigation concerning multiple patents pertaining to OPANA® ER and EPI's introduction of the re-formulation of OPANA® ER violated antitrust laws. The complaints allege violations of Sections 1 and 2 of the Sherman Act (15 U.S.C. §§ 1, 2), various state antitrust and consumer protection statutes, as well as state common law. These cases generally seek damages, treble damages, disgorgement of profits, restitution, injunctive relief and attorneys' fees. In February 2016, the District Court issued orders (i) denying defendants' motion to dismiss the claims of the direct purchasers, (ii) denying in part and granting in part defendants' motion to dismiss the claims of the indirect purchasers, but giving them permission to file amended complaints and (iii) granting defendants' motion to dismiss the complaints filed by certain retailers, but giving them permission to file amended complaints. In response to the District Court's orders, the indirect purchasers filed an amended complaint to which the defendants filed a renewed motion to dismiss certain claims, and certain retailers also filed amended complaints. The defendants successfully moved to dismiss the indirect purchaser unjust enrichment claims arising under the laws of the states of California, Rhode Island and Illinois. We cannot predict whether or not additional cases similar to those described above will be filed by other plaintiffs or the timing or outcome of any such litigation.

We are unable to predict the outcome of these matters or the ultimate legal and financial liability, if any, and at this time cannot reasonably estimate the possible loss or range of loss for these matters, if any, but will explore all options as appropriate in our best interests.

In February 2014, our subsidiary EPI received a CID (the February 2014 CID) from the U.S. Federal Trade Commission (the FTC). The FTC issued a second CID to EPI in March 2014 (the March 2014 CID). The February 2014 CID requested documents and information concerning EPI's settlement agreements with Actavis and Impax settling the OPANA® ER patent litigation, EPI's Development and Co-Promotion Agreement with Impax, and EPI's settlement agreement with Actavis settling the Lidoderm® patent litigation, as well as information concerning the marketing and sales of OPANA® ER and Lidoderm®. The March 2014 CID requested documents and information concerning EPI's acquisition of U.S. Patent No. 7,852,482 (the '482 patent), as well as additional information concerning certain litigation relating to, and the marketing and sales of OPANA® ER. The FTC also issued subpoenas for investigational hearings (similar to depositions) to our employees and former employees. In March 2016, the FTC filed a lawsuit in the U.S. District Court for the Eastern District of Pennsylvania against us and our subsidiary EPI, as well as against Allergan, Actavis, Impax and Teikoku, alleging generally that the Lidoderm® settlement agreements with Actavis and the OPANA® ER settlement agreement with Impax constituted, in whole or part, unfair methods of competition in violation Section 5(a) of the FTC Act, 15 U.S.C. § 45(a). The FTC also alleged that one provision of the agreement with Actavis violated Section 7 of the Clayton Act, 15 U.S.C. § 18. Concurrently with the filing of the FTC's complaint, Teikoku entered into a consent judgment with the FTC and was dismissed from the case. The FTC's complaint sought injunctive and declaratory relief and other remedies, including restitution and disgorgement. In June 2016, we joined in the defendants' motion to sever OPANA® ER-related claims from the Lidoderm®-related claims. In July 2016, a motion to dismiss was filed on behalf of all remaining defendants. In October 2016, the District Court granted the defendants' motion to sever the claims and ordered the FTC to file a new complaint for the OPANA® ER-related claims and to amend the existing complaint to include only the Lidoderm®-related claims. The District Court also denied the defendants' motion to dismiss as moot with leave to refile in each of the two separate actions. Subsequently in October 2016, the FTC voluntarily dismissed its pending complaint against us without prejudice. Following the FTC's voluntary dismissal, in October 2016, we, along with Impax and Actavis, filed two separate lawsuits against the FTC in the Eastern District of Pennsylvania seeking declaratory judgment relating, respectively, to the FTC's OPANA® ER-related claims and Lidoderm®-related claims. The declaratory judgment actions each sought a declaration by the court that the FTC does not have the authority under the FTC Act to bring its claims in federal court or to seek disgorgement. The declaratory judgment action concerning the OPANA® ER-related claims also sought a declaration that the FTC's claims are time-barred. In December 2016, the FTC filed a motion to dismiss the declaratory judgment actions for failure to state a claim. In January 2017, we entered into a settlement with the FTC pursuant to which the FTC re-filed claims against us, our subsidiary EPI, and other defendants in the U.S. District Court for the Northern District of California and concurrently filed a joint motion for entry of a Stipulated Order dismissing the claims against us and EPI, with prejudice. The Stipulated Order involves no monetary payment to the FTC and no admission of liability. Under the Stipulated Order, we agreed to dismiss our claims in the declaratory judgment actions, and also agreed to certain covenants relating to the future settlement of patent infringement litigation for a period of 10 years. These covenants, which are consistent with Endo's current practices in settling patent infringement cases, include a prohibition on patent settlement agreements that prevent the marketing of authorized generic products or that involve certain payments to generics manufacturers. The FTC agreed that the prior dismissal of its claims against us in the Eastern District of Pennsylvania will be treated as being with prejudice, that it will bring no other claims against us arising from the Opana® ER and Lidoderm® settlements and that it would also dismiss with prejudice its claims against our subsidiary Par Pharmaceutical Companies, Inc. (subsequently renamed Endo Generics Holdings, Inc. and with its subsidiaries and affiliates, referred to in this Note 13. Commitments and Contingencies as Par) in the action *FTC v. Actavis, Inc., et al.* pending in the U.S. District Court for the Northern District of Georgia. The Stipulated Order also requires the FTC to consider in good faith any requested modifications proposed by us in the event of a material change in the law governing the antitrust implications of patent infringement settlements. As of February 2017, the Stipulated Order of dismissal has been entered by the Northern District of California, we have dismissed the declaratory judgment actions filed against the FTC in the Eastern District of Pennsylvania, and the FTC has dismissed its claims against Par in the *Actavis* case in the Northern District of Georgia.

In November 2014, EPI received a CID from the State of Florida Office of the Attorney General issued pursuant to the Florida Antitrust Act of 1980, Section 542.28 seeking documents and other information concerning EPI's settlement agreement with Actavis settling the Lidoderm® patent litigation, as well as information concerning the marketing and sales of Lidoderm®.

In February 2015, EHSI and EPI received CIDs for Production of Documents and Information from the State of Alaska Office of Attorney General issued pursuant to Alaska's Antitrust and Unfair Trade Practices and Consumer Protection law seeking documents and other information concerning settlement agreements with Actavis and Impax settling the OPANA® ER patent litigation as well as information concerning EPI's settlement agreement with Actavis settling the Lidoderm patent litigation, as well as information concerning the marketing and sales of Lidoderm®.

In February 2016, EPI received a CID from the State of South Carolina Office of the Attorney General seeking documents and other information concerning EPI's settlement agreement with Actavis settling the Lidoderm® patent litigation, as well as information concerning the marketing and sales of Lidoderm®.

In January 2009, the FTC filed a lawsuit against our subsidiary, Par, in the U.S. District Court for the Central District of California, which was subsequently transferred to the U.S. District Court for the Northern District of Georgia, and which alleged violations of antitrust law arising out of Par's settlement of certain patent litigation concerning the generic version of AndroGel®. The FTC complaint sought a finding that Par's settlement agreement violates Section 5(a) of the FTC Act, and a permanent injunction against Par's ability to engage in certain types of patent settlements in the future. Beginning in February 2009, certain private plaintiffs, including distributors and retailers, filed similar litigation. Generally, the complaints in the remaining private plaintiff suits seek equitable relief, unspecified damages and costs.

In February 2010, the District Court granted a motion to dismiss the FTC's claims and granted in part and denied in part a motion to dismiss the claims of the private plaintiffs. In April 2012, the U.S. Court of Appeals for the 11th Circuit affirmed the District Court's decision on the motion to dismiss the FTC's claims. In September 2012, the District Court granted a motion for summary judgment against the private plaintiffs' claims of sham litigation. In July 2013, the Supreme Court of the U.S. reversed the Court of Appeals' and District Court's decisions concerning the FTC action and remanded the case to the District Court for further proceedings. In May 2016, those private plaintiffs representing the putative class of indirect purchasers voluntarily dismissed their case against Par with prejudice. In February 2017, pursuant to the Stipulated Order described above, the FTC dismissed its claims against Par with prejudice. Claims by the direct purchasers are still pending. We intend to contest this litigation vigorously and to explore all options as appropriate in our best interests.

In February 2015, Par received a CID from the Office of the Attorney General for the State of Alaska seeking production of certain documents and information regarding Par's settlement of the AndroGel® patent litigation as well as documents produced in the aforementioned litigation filed by the FTC.

We are currently cooperating with the State of Florida Office of the Attorney General, the State of Alaska Office of the Attorney General and the State of South Carolina Office of the Attorney General in their respective investigations. Investigations and lawsuits similar to these antitrust matters described above may be brought by others. We are unable to predict the outcome of these investigations or litigations or the ultimate legal and financial liability, if any, and at this time cannot reasonably estimate the possible loss or range of loss for these investigations or litigations, if any, but will explore all options as appropriate in our best interests.

In July 2016, Fresenius Kabi USA, LLC (Fresenius) filed a complaint against Par and its subsidiary Par Sterile Products, LLC in the U.S. District Court for the District of New Jersey alleging that Par and its subsidiary engaged in an anticompetitive scheme to exclude competition from the market for vasopressin solution for intravenous injection in view of Par's Vasostrict® (vasopressin) product. The complaint alleges violations of Sections 1 and 2 of The Sherman Antitrust Act, 15 U.S.C. §§ 1, 2, as well as the antitrust law and common law of the state of New Jersey, alleging that Par and its subsidiary entered into exclusive supply agreements with one or more active pharmaceutical ingredient (API) manufacturers and that Fresenius has been unable to obtain vasopressin API in order to file an ANDA to obtain FDA approval for its own vasopressin product. Fresenius seeks actual, treble and punitive damages in an unspecified amount, attorneys' fees and costs and injunctive relief and demands a trial by jury. In September 2016, Par and its subsidiary filed a motion to dismiss the case for Fresenius' failure to properly state a claim under the antitrust laws. In February 2017, the District Court denied Par's motion to dismiss. We are unable to predict the outcome of this matter or the ultimate legal and financial liability, if any, and at this time cannot reasonably estimate the possible loss or range of loss, if any, for this matter. We intend to contest the litigation vigorously and to explore all options as appropriate in our best interests.

False Claims Act Litigation

The Attorneys General of Florida, Indiana and Virginia and the U.S. Office of Personnel Management (the USOPM) have issued subpoenas, and the Attorneys General of Michigan, Tennessee, Texas, and Utah have issued CIDs, to our subsidiary, Par, among other companies. The demands generally request documents and information pertaining to allegations that certain of Par's sales and marketing practices caused pharmacies to substitute ranitidine capsules for ranitidine tablets, fluoxetine tablets for fluoxetine capsules, and two 7.5 mg buspirone tablets for one 15 mg buspirone tablet, under circumstances in which some state Medicaid programs at various times reimbursed the new dosage form at a higher rate than the dosage form being substituted. Par has provided documents in response to these subpoenas to the respective Attorneys General and the USOPM. The aforementioned subpoenas and CIDs culminated in the federal and state law qui tam action brought on behalf of the U.S. and several states by Bernard Lisitza. The complaint was unsealed in August 2011. Lisitza's corrected second amended complaint generally seeks (i) a finding that defendants violated and be enjoined from future violations of the federal False Claims Act and state false claims acts; (ii) treble damages and maximum civil penalties for each violation of the federal False Claims Act and state false claims acts; (iii) an applicable percentage share of the proceeds; and (iv) expenses, fees, and costs. The U.S. intervened in this action and filed a separate complaint in September 2011, alleging claims for violations of the Federal False Claims Act and common law fraud. The U.S.'s second corrected complaint generally seeks (i) treble damages and civil penalties for violations under the federal False Claims Act and (ii) compensatory and punitive damages for common law fraud. The states of Michigan and Indiana have also intervened as to claims arising under their respective state false claim acts, common law fraud, and unjust enrichment. Michigan's complaint generally seeks (i) treble damages and civil penalties and (ii) common law compensatory and punitive damages. Indiana's amended complaint generally seeks treble damages, costs, and attorney's fees. We intend to vigorously defend this lawsuit. At this time, we are unable to predict the outcome of this matter or the ultimate legal and financial liability, if any, and at this time cannot reasonably estimate the possible loss or range of loss for this matter, if any.

Pricing Matters

In March 2016, EPI received a CID from the U.S. Attorney's Office for the Southern District of New York. The CID requested documents and information regarding contracts with Pharmacy Benefit Managers regarding Frova®. We are currently cooperating with this investigation.

In December 2014, our subsidiary Par received a Subpoena to Testify Before Grand Jury from the Antitrust Division of the DOJ and issued by the U.S. District Court for the Eastern District of Pennsylvania. The subpoena requested documents and information focused primarily on product and pricing information relating to Par's authorized generic version of Lanoxin (digoxin) oral tablets and Par's generic doxycycline products, and on communications with competitors and others regarding those products. Par is currently cooperating fully with the investigation.

In December 2015, EPI received Interrogatories and Subpoena Duces Tecum from the State of Connecticut Office of Attorney General requesting information regarding pricing of certain of its generic products, including doxycycline hyclate, amitriptyline hydrochloride, doxazosin mesylate, methotrexate sodium and oxybutynin chloride. We are currently cooperating with this investigation.

We are unable to predict the outcome of the foregoing investigations or the ultimate legal and financial liability, if any, and at this time cannot reasonably estimate the possible loss or range of loss, if any, for these matters but will explore all options as appropriate in our best interests.

Beginning in December 2015, two complaints, including a class action complaint, were filed in the Philadelphia Court of Common Pleas against us and certain of our subsidiaries, including Par Pharmaceutical, Inc. (PPI), along with other manufacturers of generic pharmaceutical products, seeking compensatory and punitive or treble damages, as well as injunctive relief, and alleging that certain marketing and pricing practices by the defendant companies violated state law, including consumer protection law. The class action complaint was subsequently removed to the U.S. District Court for the Eastern District of Pennsylvania, and the plaintiff filed an amended complaint. In January 2017, defendants moved to dismiss the amended class action complaint, and that motion remains pending. The case in the Philadelphia Court of Common Pleas is stayed pending resolution of the class action. Additional similar claims may be brought by other plaintiffs in various jurisdictions. We intend to contest the litigation vigorously and to explore all options as appropriate in our best interests.

Beginning in March 2016, several class action complaints were filed in the U.S. District Courts for the Eastern District of Pennsylvania and the District of Rhode Island against us and certain of our subsidiaries, including PPI, and other manufacturers seeking compensatory and punitive or treble damages, as well as injunctive relief, and alleging that certain marketing and pricing practices regarding digoxin and doxycycline violated federal and/or state antitrust laws and/or gave rise to state consumer protection and/or unjust enrichment claims. The U.S. Judicial Panel on Multidistrict Litigation, pursuant to 28 U.S.C. §1407, issued an order in August 2016 establishing coordinated or consolidated pretrial proceedings for these cases in the U.S. District Court for the Eastern District of Pennsylvania under the caption *In Re Generic Digoxin and Doxycycline Antitrust Litigation*, MDL No. 2724. The direct purchaser plaintiffs and indirect purchaser plaintiffs filed consolidated amended class action complaints in January 2017, and defendants moved to dismiss those complaints in March 2017. An independent pharmacy plaintiff filed a similar class action complaint in the U.S. District Court for the Eastern District of Pennsylvania in March 2017. Additional similar claims may be brought by other plaintiffs in various jurisdictions. We intend to contest the litigation vigorously and to explore all options as appropriate in our best interests.

Since November 2016, several class action complaints have been filed in the U.S. District Court for the Eastern District of Pennsylvania against certain of our subsidiaries, including PPI, and other manufacturers seeking compensatory and punitive or treble damages, as well as injunctive relief, and alleging that certain marketing and pricing practices regarding divalproex ER violated federal and/or state antitrust laws and/or gave rise to state consumer protection and/or unjust enrichment claims. Additional similar claims may be brought by other plaintiffs in various jurisdictions. We intend to contest the litigation vigorously and to explore all options as appropriate in our best interests.

Beginning in December 2016, multiple class action complaints were filed in the U.S. District Court for the Eastern District of Pennsylvania and U.S. District Court for the Southern District of New York against us and certain of our subsidiaries, including PPI, and other manufacturers seeking compensatory and punitive or treble damages, as well as injunctive relief, and alleging that certain marketing and pricing practices regarding propranolol violated federal and/or state antitrust laws and/or gave rise to state consumer protection and/or unjust enrichment claims. Defendants moved to dismiss one direct purchaser complaint pending in the Eastern District of Pennsylvania in March 2017. The remaining Eastern District of Pennsylvania actions relating to propranolol were stayed pending a ruling from the U.S. Judicial Panel on Multidistrict Litigation on the motion to transfer described below. In the Southern District of New York actions, the indirect purchasers filed a consolidated amended complaint in February 2017, and the direct purchasers filed a consolidated amended complaint in March 2017. Defendants moved to dismiss both consolidated amended complaints, and those motions were denied in April 2017, except as to certain state law claims brought by the indirect purchaser plaintiffs. Additional similar claims may be brought by other plaintiffs in various jurisdictions. We intend to contest the litigation vigorously and to explore all options as appropriate in our best interests.

Beginning in March 2017, several class action complaints were filed in the U.S. District Court for the Eastern District of Pennsylvania against our subsidiary PPI and other manufacturers seeking compensatory and punitive or treble damages, as well as injunctive relief, and alleging that certain marketing and pricing practices regarding baclofen violated federal and/or state antitrust laws and/or gave rise to state consumer protection and/or unjust enrichment claims. Additional similar claims may be brought by other plaintiffs in various jurisdictions. We intend to contest the litigation vigorously and to explore all options as appropriate in our best interests.

Also beginning in March 2017, several class action complaints were filed in the U.S. District Courts for the Eastern District of Pennsylvania and the Southern District of New York against us and certain of our subsidiaries, including PPI, and other manufacturers seeking compensatory and punitive or treble damages, as well as injunctive relief, and alleging that certain marketing and pricing practices regarding amitriptyline hydrochloride violated federal and/or state antitrust laws and/or gave rise to state consumer protection and/or unjust enrichment claims. Additional similar claims may be brought by other plaintiffs in various jurisdictions. We intend to contest the litigation vigorously and to explore all options as appropriate in our best interests.

In January 2017, Rochester Drug Co-Operative, Inc. filed a motion with the U.S. Judicial Panel on Multidistrict Litigation seeking to transfer certain of the foregoing antitrust complaints to the U.S. District Court for the Eastern District of Pennsylvania for inclusion in MDL No. 2724, which would then be renamed *In re Generic Pharmaceuticals Pricing Antitrust Litigation*. In April 2017, the U.S. Judicial Panel on Multidistrict Litigation issued an order renaming MDL No. 2724 as requested and expanding it to include actions in which: (a) plaintiffs assert claims for price fixing of generic drugs in violation of the Sherman Act and/or state antitrust laws on behalf of overlapping putative nationwide classes of direct or indirect purchasers of generic pharmaceuticals; (b) the average market price of the subject generic pharmaceutical is alleged to have increased between 2012 and the present; (c) defendants are alleged to have effectuated the alleged conspiracy through direct company-to-company contacts and through joint activities undertaken through trade associations, in particular meetings of the Generic Pharmaceutical Association; and (d) the allegations stem from the same government investigation into anticompetitive conduct in the generic pharmaceuticals industry. Pursuant to this order, the propranolol and amitriptyline hydrochloride cases filed in the U.S. District Court for the Southern District of New York have been or we expect will be transferred to the U.S. District Court for the Eastern District of Pennsylvania as part of MDL No. 2724. As noted above, the digoxin and doxycycline, divalproex ER, and baclofen cases are already pending in the U.S. District Court for the Eastern District of Pennsylvania.

We are unable to predict the outcome of the foregoing matters or the ultimate legal and financial liability, if any, and at this time cannot reasonably estimate the possible loss or range of loss, if any, for these matters but will explore all options as appropriate in our best interests.

Megace ES® (megestrol acetate oral suspension) Cases

In September 2011, our subsidiary, PPI, along with EDT Pharma Holdings Ltd. (Elan) (now known as Alkermes Pharma Ireland Limited), filed a complaint against TWi Pharmaceuticals, Inc. (TWi) in the U.S. District Court for the District of Maryland alleging infringement of U.S. Patent No. 7,101,576 because TWi filed an ANDA with a Paragraph IV certification seeking FDA approval of a generic version of Megace® ES. A bench trial was held in October 2013, and in February 2014, the District Court issued a decision in favor of TWi, finding all asserted claims of the 7,101,576 patent invalid for obviousness. PPI appealed. In August 2014, the District Court issued a preliminary injunction enjoining TWi's launch of its generic product pending disposition of the appeal. In December 2014, the Federal Circuit reversed the District Court's decision, remanding for further findings of fact. In March 2015, the District Court issued another preliminary injunction enjoining TWi's launch of its generic product pending disposition of the case on remand. In July 2015, the District Court issued a new decision in favor of TWi, finding all of the asserted claims invalid, and TWi launched its generic product. PPI appealed again, and in December 2015, the District Court's decision in favor of TWi was affirmed without opinion. In February 2016, TWi moved the District Court to recover its lost profits, which TWi alleged in the amount of $16 million, resulting from the previous injunctions to which the District Court subjected TWi, as well as attorneys' fees and costs. PPI opposed TWi's motion. In September 2016, the District Court denied TWi's motion for attorneys' fees and costs and granted in part and denied in part TWi's motion to recover its lost profits, ordering PPI to pay $12.7 million. On November 21, 2016, PPI paid the judgment and bill of costs to TWi in the amount of $12.8 million (including interest), and a Notice of Satisfaction was filed with the Court on November 28, 2016 terminating the case.

Securities Related Class Action Litigation

In May 2016, a putative class action entitled *Craig Friedman v. Endo International plc, Rajiv Kanishka Liyanaarchie de Silva and Suketu P. Upadhyay* was filed in the U.S. District Court for the Southern District of New York by an individual shareholder on behalf of himself and all similarly situated shareholders. In August 2016, the Steamfitters' Industry Pension Fund and Steamfitters' Industry Security Benefit Fund were appointed lead plaintiffs in the action. In October 2016, a second amended complaint was filed, which added Paul Campanelli as a defendant, and we filed a motion to dismiss the case. In response, and without resolving the motion, the Court permitted lead plaintiffs to file a third amended complaint. The lawsuit alleges violations of Sections 10(b) and 20(a) of the Exchange Act based on the Group's revision of its 2016 earnings guidance and certain disclosures about its generics business, the integration of Par and its subsidiaries, certain other alleged business issues and the receipt of a CID from the U.S. Attorney's Office for the Southern District of New York regarding contracts with Pharmacy Benefit Managers concerning Frova®. Lead plaintiffs seek class certification, damages in an unspecified amount and attorneys' fees and costs. We filed a motion to dismiss the third amended complaint in December 2016. Briefing on that motion has been completed but no ruling has been issued. We are unable to predict the outcome of this matter or the ultimate legal and financial liability, if any, and at this time cannot reasonably estimate the possible loss or range of loss, if any, for this matter, but will explore all options as appropriate in our best interests and we intend to defend this lawsuit vigorously.

In November 2016, a putative class action was filed in the U.S. District Court for the Southern District of New York by an individual shareholder on behalf of herself and all similarly situated shareholders, bearing the caption *Doris Shasha v. Endo International plc Company, Rajiv Kanishka Liyanaarchchie De Silva and Suketu P. Upadhyay*. The lawsuit alleged violations of Sections 10(b) and 20(a) of the Exchange Act. It alleged that certain of the Group's public disclosures from September 28, 2015 through November 2, 2016 contained misstatements or omissions, based on news reports of an investigation by the Department of Justice into potential price collusion in the pharmaceutical industry. In November 2016, the plaintiff voluntarily dismissed the case without prejudice.

In February 2017, a putative class action entitled *Public Employees' Retirement System of Mississippi v. Endo International plc* was filed in the Court of Common Pleas of Chester County, Pennsylvania by an institutional purchaser of shares in our June 2, 2015 public offering, on behalf of itself and all similarly situated purchasers. The lawsuit alleges violations of Sections 11, 12(a)(2) and 15 of the Securities Act of 1933 against Endo, certain of Endo's current and former directors and officers, and the underwriters who participated in the offering, based on certain disclosures about Endo's generics business. In March 2017 defendants removed the case to the U.S. District Court for the Eastern District of Pennsylvania. We are unable to predict the outcome of this matter or the ultimate legal and financial liability, if any, and at this time cannot reasonably estimate the possible loss or range of loss, if any, for this matter, but will explore all options as appropriate in our best interests and we intend to defend this lawsuit vigorously.

Paragraph IV Certifications on OPANA® ER

In late 2012, two patents (U.S. Patent Nos. 8,309,122 and 8,329,216) were issued to EPI covering OPANA® ER (oxymorphone hydrochloride extended-release tablets CII). In December 2012, EPI filed a complaint against Actavis in U.S. District Court for the Southern District of New York for patent infringement based on its ANDA for a non-INTAC® technology version of OPANA® ER. In May 2013 and June 2013, EPI filed similar suits in the U.S. District Court for the Southern District of New York against the following applicants for non-INTAC® technology OPANA® ER: Roxane Laboratories, Inc. (Roxane) and Ranbaxy Laboratories Limited, which was acquired by Sun Pharmaceutical Industries Ltd. (Ranbaxy). Those suits allege infringement of U.S. Patent Nos. 7,851,482, 8,309,122, and 8,329,216. In July 2013, Actavis and Roxane were granted FDA approval to market all strengths of their respective non-INTAC® technology formulations of OPANA® ER. A trial in this case was held from March 2015 through April 2015 in the U.S. District Court for the Southern District of New York. In August 2015, the District Court ruled that all defendants infringed the claims of U.S. Patent Nos. 8,309,122 and 8,329,216. The District Court also ruled that the defendants failed to show that U.S. Patent Nos. 8,309,122 and 8,329,216 were invalid, enjoined the defendants from launching their generic products until the expiration of those patents and directed Actavis to withdraw its generic product within 60 days. In October 2015, the District Court tolled the 60-day period until it decided two pending post-trial motions. In April 2016, the District Court issued an order upholding its August 2015 ruling in EPI's favor and confirming the prior injunction against the manufacture or sale of the generic version of the non-INTAC® technology OPANA® ER currently offered by Actavis and the additional approved but not yet marketed generic version of the product developed by Roxane. The defendants filed appeals to the Court of Appeals for the Federal Circuit. We intend to continue vigorously asserting our intellectual property rights and to oppose any such appeal.

From September 21, 2012 through October 30, 2013, EPI and its partner Grünenthal received Paragraph IV Notices from each of Teva Pharmaceuticals USA, Inc., Amneal Pharmaceuticals, LLC (Amneal), ThoRx Laboratories, Inc. (ThoRx), Actavis, Impax and Ranbaxy (now Sun Pharmaceutical Industries Ltd.), advising of the filing by each such company of an ANDA for a generic version of the formulation of OPANA® ER with INTAC® technology. These Paragraph IV Notices refer to U.S. Patent Nos. 7,851,482, 8,075,872, 8,114,383, 8,192,722, 8,309,060, 8,309,122 and 8,329,216, which variously cover the formulation of OPANA® ER, a highly pure version of the active pharmaceutical ingredient and the release profile of OPANA® ER. EPI filed lawsuits against each of these filers in the U.S. District Court for the Southern District of New York. Each lawsuit was filed within the 45-day deadline to invoke a 30-month stay of FDA approval pursuant to the Hatch-Waxman legislative scheme. A trial in this case was held from March 2015 through April 2015 in the U.S. District Court for the Southern District of New York against the remaining filers. In August 2015, the District Court issued an Opinion holding that all defendants infringed the claims of U.S. Patent Nos. 8,309,060, 8,309,122 and 8,329,216. The Opinion also held that the defendants had shown that U.S. Patent No. 8,309,060 was invalid, but that the defendants had failed to show that U.S. Patent Nos. 8,309,122 and 8,329,216 were invalid. The District Court also issued an Order enjoining the defendants from launching their generic products until the expiration of U.S. Patent Nos. 8,309,122 and 8,329,216. The defendants filed appeals to the Court of Appeals for the Federal Circuit. We intend to continue to vigorously assert our intellectual property and oppose appeals by the defendants. However, there can be no assurance that we and/or Grünenthal will be successful. If we are unsuccessful and Teva, Amneal, ThoRx, Actavis or Impax is able to obtain FDA approval of its product, generic versions of OPANA® ER INTAC® technology may be launched prior to the applicable patents' expirations in 2023. Additionally, we cannot predict or determine the timing or outcome of this defense but will explore all options as appropriate in our best interests.

In August 2014 and October 2014, the U.S. Patent Office issued U.S. Patent Nos. 8,808,737 and 8,871,779 respectively, which cover a method of using OPANA® ER and a highly pure version of the active pharmaceutical ingredient of OPANA® ER. In November 2014, EPI filed lawsuits against Teva, ThoRx, Actavis, Impax, Ranbaxy, Roxane, Amneal, and Sandoz Inc. based on their ANDAs filed against both the INTAC® technology and non-INTAC® technology versions of OPANA® ER. Those lawsuits were filed in the U.S. District Court for the District of Delaware alleging infringement of these new patents, which expire in 2027 and 2029, respectively. On November 17, 2015, the District Court held the '737 patent invalid for claiming unpatentable subject matter. That patent has been dismissed from all suits and the suits administratively closed as to that patent, subject to appeal at the end of the case on the '779 patent. Beginning July 11, 2016, a three-day trial was held in the U.S. District Court for the District of Delaware against Teva and Amneal for infringement of the '779 patent. In October 2016, the District Court issued an Opinion holding that the defendants infringed the claims of U.S. Patent No. 8,871,779. The Opinion also held that the defendants had failed to show that U.S. Patent No. 8,871,779 was invalid. The District Court issued an Order enjoining the defendants from launching their generic products until the expiration of U.S. Patent No. 8,871,779 in November 2029. A trial for infringement of the '799 patent by Actavis was held in February 2017 in the same court (U.S. District Court for the District of Delaware) in front of the same judge.

We intend to defend vigorously our intellectual property rights and to pursue all available legal and regulatory avenues in defense of both the non-INTAC® technology formulation OPANA® ER and the INTAC® technology formulation OPANA® ER, including enforcement of the product's intellectual property rights and approved labeling. However, there can be no assurance that we will be successful. If we are unsuccessful, competitors that already have obtained, or are able to obtain, FDA approval of their products may be able to launch their generic versions of OPANA® ER prior to the applicable patents' expirations. Additionally, we cannot predict or determine the timing or outcome of related litigation but will explore all options as appropriate in our best interests. In addition to the above litigation, it is possible that another generic manufacturer may also seek to launch a generic version of OPANA® ER and challenge the applicable patents.

Paragraph IV Certification on Fortesta® Gel

In January 2013, EPI and its licensor Strakan Limited received a notice from Watson advising of the filing by Watson of an ANDA for a generic version of Fortesta® (testosterone) Gel. In February 2013, EPI filed a lawsuit against Watson in the U.S. District Court for the Eastern District of Texas, Marshall division. Because the suit was filed within the 45-day period under the Hatch-Waxman Act for filing a patent infringement action, we believe that it triggered an automatic 30-month stay of approval under the Act. A two-day trial was held on or about February 26 and 27, 2015. In August 2015, the District Court issued an Order holding that the asserted patents are valid and are infringed by Watson's ANDA. As a result, the District Court ordered that the effective date for the approval of Watson's ANDA to be the date no sooner than the latest expiration date of the '913 Patent and the '865 Patent in November of 2018. Watson filed an appeal in October 2015. In October 2016, the Court of Appeals for the Federal Circuit issued an opinion upholding the District Court's decision.

We intend, and have been advised by Strakan Limited that it too intends, to defend vigorously Fortesta® Gel and to pursue all available legal and regulatory avenues in defense of Fortesta® Gel, including enforcement of the product's intellectual property rights and approved labeling. However, there can be no assurance that we and/or Strakan will be successful. We cannot predict or determine the timing or outcome of this litigation but will explore all options as appropriate in our best interests. In addition to the above litigation, it is possible that another generic manufacturer may also seek to launch a generic version of Fortesta® Gel and challenge the applicable patents.

Other Proceedings and Investigations

In addition to the above proceedings, proceedings similar to those described above may also be brought in the future. Additionally, we are involved in, or have been involved in, arbitrations or various other proceedings that arise from the normal course of our business. We cannot predict the timing or outcome of these other proceedings. Currently, neither we nor our subsidiaries are involved in any other proceedings that we expect to have a material effect on our business, financial condition, results of operations and cash flows.

Leases

We lease certain fixed assets under capital leases that expire through 2025. We lease automobiles, machinery and equipment and facilities under certain noncancelable operating leases that expire through 2024. These leases are renewable at our option.

On October 28, 2011, our subsidiary EPI entered into a lease agreement for a new Group headquarters in Malvern, Pennsylvania. The term of this lease is 12 years and includes three renewal options, each for an additional 60-month period. On September 4, 2014, the Group entered into a sublease agreement to lease approximately 60,000 square feet from January 1, 2015 to December 31, 2016 increasing to 90,000 square feet from January 1, 2017 to December 31, 2024. We will receive approximately $20.0 million in minimum rental payments over the remaining term of the sublease.

Our lease is accounted for as a direct financing arrangement whereby the Group recorded, over the construction period, the full cost of the asset in Tangible fixed assets, net. A corresponding liability was also recorded, net of leasehold improvements paid for by the Group, and is being amortized over the expected lease term through monthly rental payments using an effective interest method. At December 31, 2016, there was a liability of $42.8 million related to this arrangement, $4.4 million of which is included in Accounts payable and accrued expenses and $38.4 million of which is included in Other provision for liabilities in the accompanying Consolidated Balance Sheet.

A summary of minimum future rental payments required under capital and operating leases as of December 31, 2016 are as follows (in thousands):

	Capital Leases (1)	Operating Leases
2017	$ 8,591	$ 17,531
2018	7,269	16,295
2019	7,368	14,158
2020	7,360	11,923
2021	7,542	9,386
Thereafter	24,178	22,295
Total minimum lease payments	$ 62,308	$ 91,588
Less: Amount representing interest	5,332	
Total present value of minimum payments	$ 56,976	
Less: Current portion of such obligations	8,591	
Long-term capital lease obligations	$ 48,385	

(1) The direct financing arrangement is included under Capital Leases. Minimum payments have not been reduced by minimum sublease rentals of $20.0 million due in the future under a noncancelable sublease.

Expense incurred under operating leases were $22.2 million and $20.1 million for the years ended December 31, 2016 and 2015, respectively.

Contractual Obligations. The following table lists our enforceable and legally binding noncancelable obligations as of December 31, 2016.

	Payment Due by Period (in thousands)						
Contractual Obligations	**Total**	**2017**	**2018**	**2019**	**2020**	**2021**	**Thereafter**
Long-term debt obligations (1)	$ 8,398,930	$ 131,125	$ 179,250	$ 715,500	$ 28,000	$ 28,000	$ 7,317,055
Interest expense (2)	2,474,242	416,817	411,748	387,972	383,442	382,075	492,188
Capital lease obligations (3)	62,308	8,591	7,269	7,368	7,360	7,542	24,178
Operating lease obligations (4)	91,588	17,531	16,295	14,158	11,923	9,386	22,295
Purchase obligations (5)	71,794	55,274	7,143	2,717	2,440	1,313	2,907
Mesh-related product liability settlements (6)	674,078	674,078	—	—	—	—	—
Other obligations and commitments (7)	10,500	3,500	3,500	500	500	500	2,000
Total (8)	$ 11,783,440	$ 1,306,916	$ 625,205	$ 1,128,215	$ 433,665	$ 428,816	$ 7,860,623

(1) Includes minimum cash payments related to principal associated with our indebtedness. A discussion of such indebtedness is included above under the caption “Borrowings”.

(2) These amounts represent future cash interest payments related to our existing debt obligations based on fixed and variable interest rates specified in the associated debt agreements. Payments related to variable debt are based on applicable rates at December 31, 2016 plus the specified margin in the associated debt agreements for each period presented.

(3) Includes minimum cash payments related to certain fixed assets, primarily related to technology. In addition, includes minimum cash payments related to the direct financing arrangement for our U.S. headquarters in Malvern, Pennsylvania. We have agreed to sublease a portion of the Malvern facility, equal to approximately 90,000 square feet, through December 31, 2024. We will receive approximately $20.0 million in minimum rental payments over the remaining term of the sublease, which is not included in the table above.

(4) Includes minimum cash payments related to our leased automobiles, machinery and equipment and facilities not included in capital lease obligations. Under the terms of our leases for our former headquarters in Chadds Ford, Pennsylvania, the former Auxilium headquarters in Chesterbrook, Pennsylvania, and the former AMS headquarters in Eden Prairie, Minnesota, we are required to continue to pay all future minimum lease payments to the landlord. We have agreed to sublease the entire Chadds Ford facility through March 31, 2018 and the entire Eden Prairie facility through December 21, 2020. We will receive approximately $2.8 million in minimum rental payments over the remaining terms of the subleases, which is not included in the table above.

(5) Purchase obligations are enforceable and legally binding obligations for purchases of goods and services including minimum stock contracts.

(6) The amount included above represents contractual payments for mesh-related product liability settlements pursuant to existing Master Settlement Agreements (MSAs) and reflect the earliest date that a settlement payment could be due and the largest amount that could be due on that date. These matters are described in more detail in Note 13. Commitments and Contingencies in the Consolidated Financial Statements in this report.

(7) Other obligations and commitments include agreements to purchase third-party assets, products and services and other minimum royalty obligations.

(8) Total does not include contractual obligations already included in current liabilities on our Consolidated Balance Sheets, except for current portion of long-term debt, short-term capital lease obligations, short-term royalty obligations and the current portion of the mesh-related product liability or certain purchase obligations, which are discussed below.

For purposes of the table above, obligations for the purchase of goods or services are included only for significant noncancelable purchase orders at least one year in length that are enforceable, legally binding and specify all significant terms, including fixed or minimum quantities to be purchased, fixed, minimum or variable price provisions and the timing of the obligation. Our purchase orders are based on our current manufacturing needs and are typically fulfilled by our suppliers within a relatively short period. At December 31, 2016, we have open purchase orders that represent authorizations to purchase rather than binding agreements that are not included in the table above. In addition, we do not include collaboration agreements and potential payments under those agreements or potential payments related to contingent consideration.

As of December 31, 2016, our liability for unrecognized tax benefits amounted to $443.6 million (including interest and penalties). Due to the nature and timing of the ultimate outcome of these uncertain tax positions, we cannot make a reliable estimate of the amount and period of related future payments. Therefore, our liability has been excluded from the above contractual obligations table.

NOTE 14. OTHER COMPREHENSIVE PROFIT (LOSS)

The following table presents the tax effects allocated to each component of Other comprehensive profit (loss) for the years ended December 31 (in thousands):

	2016			2015		
	Before-Tax Amount	Tax Benefit (Expense)	Net-of-Tax Amount	Before-Tax Amount	Tax (Expense) Benefit	Net-of-Tax Amount
Net unrealized (loss) gain on securities:						
Unrealized (loss) gain arising during the period	$ (1,588)	$ 674	$ (914)	$ 2,349	$ (50)	$ 2,299
Less: reclassification adjustments for (gain) loss realized in net loss	(6)	—	(6)	—	—	—
Net unrealized (losses) gains	(1,594)	674	(920)	2,349	(50)	2,299
Net unrealized gain (loss) on foreign currency:						
Foreign currency translation gain (loss) arising during the period	18,267	13,462	31,729	(263,425)	(21,297)	(284,722)
Less: reclassification adjustments for loss realized in net loss	—	—	—	25,557	158	25,715
Foreign currency translation gain (loss)	$ 18,267	$ 13,462	$ 31,729	$(237,868)	$ (21,139)	$(259,007)
Other comprehensive profit (loss)	$ 16,673	$ 14,136	$ 30,809	$(235,519)	$ (21,189)	$(256,708)

Reclassification adjustments out of Other comprehensive profit (loss) are reflected in the Consolidated Profit and Loss Account as Other expense (income) net, with respect to the realized loss on securities or Discontinued operations, net of tax, with respect to the realized loss from foreign currency translation.

The following is a summary of the accumulated balances related to each component of Other comprehensive loss, net of taxes, at December 31, 2016 and 2015 (in thousands):

	December 31, 2016	December 31, 2015
Net unrealized gains	$ 895	$ 1,815
Foreign currency translation loss	(354,329)	(386,020)
Accumulated other comprehensive loss	$ (353,434)	$ (384,205)

NOTE 15. SHARE CAPITAL

On February 11, 2014, the Group issued 4,000,000 euro deferred shares of US$0.01 each at par. The euro deferred shares are held by nominees in order to satisfy an Irish legislative requirement to maintain a minimum level of issued share capital denominated in euro and to have at least seven registered shareholders. The euro deferred shares carry no voting rights and are not entitled to receive any dividend or distribution.

On January 29, 2015, the Group acquired Auxilium for total consideration of $2.6 billion. The consideration included 18,609,835 ordinary shares valued at $1.52 billion.

On June 10, 2015, we completed the sale of 27,627,628 ordinary shares, including 3,603,603 ordinary shares sold upon the exercise in full by the underwriters of their option to purchase additional ordinary shares from us, at a price of $83.25 per share, for aggregate gross proceeds to us of $2.30 billion, before fees, in order to finance a portion of the Par acquisition (described in more detail in Note 5. Acquisitions).

On September 25, 2015, the Group acquired Par for total consideration of $8.14 billion, including the assumption of Par debt. The consideration included 18,069,899 ordinary shares valued at $1.33 billion.

During the year ended December 31, 2015, the Group completed a buy-out of the minority interest associated with its Litha subsidiary. The following table reflects the effect on the Group’s equity for the year ended December 31, 2015 (in thousands):

Adjustment to Accumulated other comprehensive loss related to the reallocation (from minority to controlling interests) of foreign currency translation loss attributable to our minority interest in Litha	$ (3,904)
Decrease in minority interests for buy-out of Litha	(32,732)
Decrease in additional paid-in capital for buy-out of Litha	(2,972)
Total cash consideration paid related to buy-out of Litha	$ (39,608)

Share Capital consists of the following for the year ended December 31 (in thousands):

(In thousands, except per share amounts)	2016	2015
Authorized:		
4,000,000 Euro deferred shares of $0.01 par value	$ 40	$ 40
1,000,000,000 ordinary shares of $0.0001 par value	100	100
Total share capital	$ 140	$ 140

Allotted, called-up and fully paid equity:	(In thousands)
BALANCE, DECEMBER 31, 2014	$ 63
Issuance of 18,609,835 ordinary shares of $0.0001 par value to Auxilium in connection with the purchase of Auxilium	2
Issuance of 27,982,302 ordinary shares of $0.0001 par value	3
Issuance of 18,069,899 ordinary shares of $0.0001 par value to Par in connection with the purchase of Par	2
Shares issued under employee share plans	—
Other	(5)
BALANCE, DECEMBER 31, 2015	$ 65
Shares issued under employee share plans	—
Other	(1)
BALANCE, DECEMBER 31, 2016	$ 64

Share Repurchase Program

The Group has broad shareholder authority to conduct share repurchases of its ordinary shares, as our shareholders granted to the Group a general authority (the 2014 Share Buyback Authority) to make overseas market purchases (as defined by section 212 of the Irish Companies Act 1990 (the 1990 Act)) of shares of the Group on such terms and conditions as our Board of Directors may approve, but subject to the provisions of the 1990 Act and certain other provisions.

Pursuant to the 2014 Share Buyback Authority, in April 2015, our Board of Directors approved a share buyback program (the 2015 Share Buyback Program). The 2015 Share Buyback Program authorized the Group to redeem in the aggregate $2.5 billion of its outstanding ordinary shares. As permitted by Irish Law and the Group's Articles of Association, all ordinary shares redeemed under the 2015 Share Buyback Program shall be cancelled upon redemption.

In November 2015, the Group entered into a program to repurchase up to $250.0 million of its ordinary shares under the 2015 Share Buyback Program. The Group purchased approximately 4.4 million of its ordinary shares during November 2015 totaling $250.0 million, not including related fees.

NOTE 16. SHARE-BASED COMPENSATION

As discussed in Note 3. Discontinued Operations and Held for Sale, the operating results of the Group's AMS and Healthtronics businesses are reported as Discontinued operations, net of tax in the Consolidated Profit and Loss Account for all periods presented. However, as share-based compensation is not material for these businesses, amounts in this Note 16. Share-based Compensation have not been adjusted to exclude the impact of these businesses.

Stock Incentive Plans

In June 2015, the Group's shareholders approved the 2015 Stock Incentive Plan (the 2015 Plan). As of the effective date of the 2015 Plan, 10.0 million ordinary shares, including the transfer of 5.0 million ordinary shares available to be granted under the previous 2010 Stock Incentive Plan, were reserved for the granting of stock options (including incentive stock options), stock appreciation rights, restricted stock awards, performance awards and other share-based awards, which may be issued at the discretion of the Group's board of directors from time to time. Upon the approval of the 2015 Plan, no additional ordinary shares were to be granted under the previously approved plans, including the Group's 2000, 2004, 2007, 2010 and Assumed Stock Incentive Plans. All awards previously granted and outstanding under the prior plans remain subject to the terms of those prior plans.

At December 31, 2016, approximately 6.9 million ordinary shares were reserved for future grants under the 2015 Plan. As of December 31, 2016, stock options, restricted stock awards, performance stock units and restricted stock units have been granted under the stock incentive plans.

All share-based compensation cost is measured at the grant date, based on the estimated fair value of the award, and is recognized as an expense in the profit and loss account over the requisite service period.

The Group recognized share-based compensation expense of $59.8 million and $98.8 million during the years ended December 31, 2016 and 2015, respectively. The share-based compensation expense recognized during the year ended December 31, 2015 includes a charge related to the acceleration of Auxilium employee equity awards at closing of $37.6 million and $11.4 million of expense related to certain AMS equity awards modified in conjunction with the anticipated sale of the business. The AMS amounts are recorded in Discontinued Operations, net of tax. As of December 31, 2016, the total remaining unrecognized compensation cost related to all non-vested share-based compensation awards amounted to $56.4 million.

Presented below is the allocation of share-based compensation as recorded in our Consolidated Profit and Loss Account for the years ended December 31 (in thousands).

	2016	2015
Selling, general and administrative expenses	$ 54,176	$ 79,928
Research and development expenses	2,440	2,388
Cost of sales	2,040	2,241
Discontinued operations (Note 3)	1,113	14,231
Total share-based compensation expense	$ 59,769	$ 98,788

Stock Options

During the years ended December 31, 2016 and 2015, the Group granted stock options to employees of the Group as part of their annual share compensation award and, in certain circumstances, upon their commencement of service with the Group. Employee stock options generally vest ratably, in equal amounts, over a three or four-year service period and expire ten years from the grant date. For all of the Group's share-based compensation plans, the fair value of each option grant was estimated at the date of grant using the Black-Scholes option-pricing model. Black-Scholes utilizes assumptions related to volatility, the risk-free interest rate, the dividend yield (which is assumed to be zero, as the Group has not paid cash dividends to date and does not currently expect to pay cash dividends) and the expected term of the option. Expected volatilities utilized in the model are based mainly on the historical volatility of the Group's share price over a period commensurate with the expected life of the share option as well as other factors. The risk-free interest rate is derived from the U.S. Treasury yield curve in effect at the time of grant. We estimate the expected term of options granted based on our historical experience with our employees' exercise of stock options and other factors.

A summary of the activity for each of the years ended December 31 is presented below:

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value
Outstanding as of January 1, 2015	3,063,352	$ 40.15		
Granted	794,757	$ 77.27		
Exercised	(880,885)	$ 30.93		
Forfeited	(201,397)	$ 72.24		
Expired	(7,260)	$ 45.20		
Outstanding as of December 31, 2015	2,768,567	$ 51.56		
Granted	2,578,105	$ 35.45		
Exercised	(62,589)	$ 31.19		
Forfeited	(858,556)	$ 52.27		
Expired	(100,318)	$ 60.71		
Outstanding as of December 31, 2016	4,325,209	$ 41.70	6.25	$ 740,404
Vested and expected to vest as of December 31, 2016	4,105,417	$ 41.53	6.10	$ 658,071
Exercisable as of December 31, 2016	1,823,819	$ 41.23	2.70	$ —

The range of exercise prices for the above stock options outstanding at December 31, 2016 is from $14.30 to $89.68.

The total intrinsic value of options exercised during the years ended December 31, 2016 and 2015 was $1.3 million and $27.2 million, respectively. The weighted average grant date fair value of the stock options granted in the years ended December 31, 2016 and 2015 was $11.46 and $21.09 per option, respectively, determined using the following average assumptions:

	2016	2015
Expected term (years)	4.0	4.0
Risk-free interest rate	1.1%	1.3%
Dividend yield	—	—
Expected volatility	43%	32%

As of December 31, 2016, the weighted average remaining requisite service period of the non-vested stock options was 2.6 years. As of December 31, 2016, the total remaining unrecognized compensation cost related to non-vested stock options amounted to $16.9 million.

Restricted Stock Units and Performance Share Units

During the years ended December 31, 2016 and 2015, the Group granted restricted stock units (RSUs) and performance share units (PSUs) to employees of the Group as part of their annual share compensation award and, in certain circumstances, equity awards granted upon an employee's commencement of service with the Group. RSUs vest ratably, in equal amounts, over a three or four-year service period. PSUs vest in full after a three-year service period and are conditional upon the achievement of performance or market conditions established by the compensation committee of the Board of Directors.

In 2016, PSU grants are tied to total shareholder return (TSR) relative to the TSR of a selected industry group, with maximum payout levels also based on absolute compounded annual growth rate (CAGR) stock price objectives. Each award covered a three-year performance cycle. The actual number of shares awarded is adjusted to between zero and 300% of the target award amount based upon achievement of pre-determined relative TSR goals. TSR relative to peers is considered a market condition under applicable authoritative guidance.

Starting in 2014 and continuing in 2015, PSU grants are tied to the attainment of absolute CAGR for the Group's ordinary share price, which is considered a market condition under applicable authoritative guidance. Each award covers a three-year performance cycle. The actual number of shares awarded is adjusted to between zero and 300% of the target award amount based upon achievement of pre-determined CAGR goals.

Also starting in 2014 and continuing in 2015, the Group approved a share matching program (Matched PSUs), which is applicable to certain executive leadership team members. The program allows participants to make a direct investment in Endo ordinary shares during a pre-defined period, which the Group would immediately grant a Matched PSU for each qualifying ordinary share purchased up to the employee's base salary. The Matched PSUs would vest on the third anniversary of the date issued to the employee if the CAGR of the Group's ordinary shares is at least 10% over the three-year period. This program can be offered on a periodic basis, and the initial offering period was open from November 2014 through December 2015, not including blackout periods.

A summary of our nonvested restricted and performance stock units for the years ended December 31 is presented below:

	Number of Shares	Aggregate Intrinsic Value
Nonvested as of January 1, 2015	1,654,753	
Granted	927,214	
Forfeited	(251,351)	
Vested	(523,763)	
Nonvested as of December 31, 2015	1,806,853	
Granted	1,582,429	
Forfeited	(975,994)	
Vested	(728,228)	
Nonvested as of December 31, 2016	1,685,060	$ 27,230,570
Vested and expected to vest as of December 31, 2016	1,524,287	$ 24,632,473

As of December 31, 2016, the weighted average remaining requisite service period of these units was 2.3 years. The weighted average grant date fair value of the units granted during the years ended December 31, 2016 and 2015 was $43.52 and $72.34 per unit, respectively. As of December 31, 2016, the total remaining unrecognized compensation cost related to non-vested RSUs and PSUs amounted to $30.5 million and $9.0 million, respectively.

Employee Stock Purchase Plan

The Endo International plc Employee Stock Purchase Plan (ESPP) is a Group-sponsored plan that enables employees to voluntarily elect, in advance of any of the four quarterly offering periods ending March 31, June 30, September 30 and December 31 of each year, to contribute up to 10% of their eligible compensation, subject to certain limitations, to purchase ordinary shares at 90% of the lower of the closing price of Endo ordinary shares on the first or last trading day of each offering period. The maximum number of shares that a participant may purchase in any calendar year is equal to $25,000 divided by the closing selling price per ordinary share on the first day of the offering period, subject to certain adjustments. Compensation expense is calculated in accordance with the applicable accounting guidance and is based on the share price at the beginning or end of each offering period and the purchase discount. Obligations under the ESPP may be satisfied by the reissuance of treasury stock, by the Group's purchase of shares on the open market or by the authorization of new shares. The maximum number of shares available under the ESPP, pursuant to the terms of the ESPP plan document, is 1% of the common shares outstanding on April 15, 2011 or approximately 1.2 million shares. The ESPP shall continue in effect until the earlier of (i) the date when no shares are available for issuance under the ESPP, at which time the ESPP shall be suspended pursuant to the terms of the ESPP plan document, or (ii) December 31, 2022, unless earlier terminated. The ESPP has been suspended effective January 1, 2017. Compensation expense during the years ended December 31, 2016 and 2015 related to the ESPP totaled $0.8 million and $0.8 million, respectively. The Group issued 306,918 ordinary shares with a cost totaling $5.1 million during the year ended December 31, 2016 pursuant to the ESPP and 67,867 ordinary shares with a cost totaling $4.3 million during the year ended December 31, 2015.

NOTE 17. OTHER (INCOME) EXPENSE, NET

The components of Other (income) expense, net for the years ended December 31 are as follows (in thousands):

	2016	2015
Foreign currency loss (gain), net	$ 2,991	$ (23,058)
Equity (earnings) loss from unconsolidated subsidiaries, net	(1,190)	3,217
Other-than-temporary impairment of equity investment	—	18,869
Legal settlement	—	(12,500)
Costs associated with unused financing commitments	—	78,352
Other miscellaneous, net	(2,139)	(1,189)
Other (income) expense, net	$ (338)	$ 63,691

Foreign currency loss (gain), net results from the remeasurement of the Group's foreign currency denominated assets and liabilities. During 2015, the Group recognized an other-than-temporary impairment of its Litha joint venture investment totaling $18.9 million, reflecting the excess carrying value of this investment over its estimated fair value. In addition, the Group incurred $78.4 million during 2015 related to unused commitment fees primarily associated with financing for the Par acquisition.

NOTE 18. INCOME TAXES

Our operations are conducted through our various subsidiaries in numerous jurisdictions throughout the world. We have provided for income taxes based upon the tax laws and rates in the countries in which our operations are conducted.

The components of our (loss) profit on ordinary activities before taxation by geography for the years ended December 31 are as follows (in thousands):

	2016	2015
United States	$ (4,309,211)	$ (626,740)
International	385,355	(811,124)
Total (loss) profit on ordinary activities before taxation	$ (3,923,856)	$ (1,437,864)

Income tax on ordinary activities consists of the following for the years ended December 31 (in thousands):

	2016	2015
Current:		
U.S. Federal	$ 18,369	$ (308,909)
U.S. State	9,501	(5,600)
International	22,851	16,722
Total current income tax	$ 50,721	$ (297,787)
Deferred:		
U.S. Federal	$ (661,484)	$ (779,757)
U.S. State	(239)	(70,221)
International	(83,619)	(9,376)
Total deferred income tax	$ (745,342)	$ (859,354)
Excess tax benefits of stock compensation exercised	$ (5,463)	$ 19,676
Valuation allowance	—	—
Total income tax	$ (700,084)	$ (1,137,465)

A reconciliation of income tax on ordinary activities at the U.S. federal statutory income tax rate to the total income tax provision on ordinary activities for the years ended December 31 is as follows (in thousands):

	2016	2015
Notional U.S. federal income tax provision at the statutory rate	$ (1,373,350)	$ (503,271)
State income tax, net of federal benefit	5,182	(45,823)
Research and development credit	(3,549)	(5,549)
Uncertain tax positions	(18,111)	30,974
Residual tax on non-U.S. net earnings	(301,666)	(359,831)
Effects of outside basis differences	(636,134)	(786,130)
Non-deductible goodwill impairment	926,881	248,403
Change in valuation allowance	762,604	278,339
Intra-entity transfers of assets	(92,859)	—
Effect of permanent items:		
Branded prescription drug fee	4,090	10,753
Domestic production activities deduction	—	—
Transaction-related expenses	229	9,872
Excise tax	—	—
Executive compensation limitation	—	467
Extinguishment of debt	—	—
Share based compensation	614	950
Audit settlements	—	—
Other	25,985	(16,619)
Income tax	$ (700,084)	$ (1,137,465)

During the year ended December 31, 2016, the Group recorded a $636.1 million net tax benefit related to worthless stock deductions that are reflected as a component of benefits from outside basis differences. During the year ended December 31, 2015, the Group recorded a $674.2 million net tax benefit predominately related to a worthless stock deduction directly attributable to mesh product liability losses that is reflected as a component of benefits from outside basis differences. The Group claimed the worthless stock deduction on its 2015 U.S. Federal and State income tax returns.

Deferred income taxes result from temporary differences between the amount of assets and liabilities recognized for financial reporting and tax purposes. The components of the net deferred income tax liability were as follows, excluding assets and liabilities held for sale, shown on the balance sheets for the years ended December 31 are as follows (in thousands):

	2016	2015
Deferred tax assets:		
Accrued expenses and customer allowances	$ 232,101	$ 286,620
Compensation related to stock options	24,246	22,532
Deferred interest expense	57,440	290,600
Fixed assets and intangible assets	55,473	—
Loss on capital assets	9,904	7,210
Net operating loss carryforward	4,410,386	635,030
Other	30,262	7,564
Research and development credit carryforward	4,244	56,489
Tax credit carryforwards	4,520	96,952
Uncertain tax positions	10,562	8,211
Total gross deferred income tax assets	$ 4,839,138	$ 1,411,208
Deferred tax liabilities:		
Fixed assets and intangible assets	$ —	$ (1,759,009)
Other	—	(25,978)
Outside basis difference	(182,409)	(59,434)
Prepaid royalties	—	(413)
Total gross deferred income tax liabilities	$ (182,409)	$ (1,844,834)
Valuation allowance	(4,841,209)	(426,991)
Net deferred income tax liability	$ (184,480)	$ (860,617)

At December 31, 2016, the Group had the following significant deferred tax assets for certain tax credits net of unrecognized tax benefits (in thousands):

Jurisdiction	2016	Begin to Expire
Canada		
Investment tax credits	$ 9,072	2022
United States		
Research and development credits	$ 4,244	2026

At December 31, 2016, the Group had the following significant deferred tax assets for net operating and capital loss carryforwards for tax purposes net of unrecognized tax benefits (in thousands):

Jurisdiction	2016	Begin to Expire
Ireland	$ 11,758	Indefinite
Luxembourg	$ 4,246,531	Indefinite
United States:		
Federal ordinary losses	$ 41,087	2020
State-capital losses	$ 5,044	2026
State-ordinary losses	$ 98,645	2017

A valuation allowance is required when it is more likely than not that all, or a portion of, a deferred tax asset will not be realized. The Group assesses the available positive and negative evidence to estimate if sufficient future taxable income will be generated to use the existing deferred tax assets. The amount of the deferred tax asset considered realizable, however, could be adjusted if estimates of future taxable income during the carryforward period are reduced or increased, or if objective negative evidence, in the form of cumulative losses, is no longer present and additional weight may be given to subjective evidence, such as projections for growth.

The Group has recorded a valuation allowance against certain jurisdictional net operating loss carryforwards and other tax attributes. As of December 31, 2016 and 2015, the valuation allowance was $4,841.2 million and $427.0 million, respectively. During the years ended December 31, 2016 and 2015, the Group increased its valuation allowance in the amount of $4,414.2 million and $386.3 million, respectively. The net increase in the Group's valuation allowance as of December 31, 2016 was primarily split into three main components: $3,950.1 million related to losses within jurisdictions unable to support recognition of a deferred tax asset with the largest jurisdiction being Luxembourg, where the Group recognized a material loss on its investment in the equity of consolidated subsidiaries, $67.1 million relating to state tax benefits and $400.8 million related to recording a valuation allowance on U. S. deferred tax assets. The net increase in the Group's valuation allowance as of December 31, 2015 was primarily split into three main components: $14.7 million related to acquisitions, $25.9 million relating to state tax benefits, and $349.4 million relating to losses within jurisdictions that the Group was unable to support the recognition of a deferred tax asset.

At December 31, 2016, the Group had the following significant valuation allowances for tax purposes (in thousands):

Jurisdiction	2016
Canada	$ 2,692
Ireland	$ 66,983
Luxembourg	$ 4,246,531
Mexico	$ 1,063
Netherlands	$ 1,367
South Africa	$ 26,240
United States	$ 521,064

We have provided income taxes for earnings that are currently distributed as well as the taxes associated with certain earnings that are expected to be distributed in the future. No additional provision has been made for Irish and non-Irish income taxes on the undistributed earnings of subsidiaries or for unrecognized deferred tax liabilities for temporary differences related to basis differences in investments in subsidiaries, as such earnings are expected to be indefinitely reinvested, the investments are essentially permanent in duration, or we have concluded that no additional tax liability will arise as a result of the distribution of such earnings. As of December 31, 2016, certain subsidiaries had approximately $157.3 million of cumulative undistributed earnings that have been retained indefinitely and reinvested in our global operations, including working capital; tangible fixed assets; intangible assets; and research and development activities. A liability could arise if our intention to indefinitely reinvest such earnings were to change and amounts are distributed by such subsidiaries or if such subsidiaries are ultimately disposed. It is not practicable to estimate the additional income taxes related to indefinitely reinvested earnings or the basis differences related to investments in subsidiaries. Our current plans do not demonstrate a need to repatriate cash at bank and in-hand that are designated as indefinitely reinvested in order to fund our operations, including investing and financing activities.

The Group and its subsidiaries are subject to income taxes in the U.S., various states and numerous foreign jurisdictions with varying statutes as to which tax years are subject to examination by the tax authorities. The Group has taken positions on its tax returns that may be challenged by various tax authorities for which reserves have been established for tax-related uncertainties. These accruals for tax-related uncertainties are based on the Group's best estimate of the potential tax exposures. When particular matters arise, a number of years may elapse before such matters are audited and finally resolved. Favorable resolution of such matters could be recognized as a reduction of the Group's effective tax rate in the year of resolution. Resolution of any particular issue could increase the effective tax rate and may require the use of cash in the year of resolution.

As of December 31, 2016, the Group had total unrecognized income tax benefits of $443.6 million. If recognized in future years, $435.4 million of these currently unrecognized income tax benefits would impact the income tax provision and effective tax rate. As of December 31, 2015, the Group had total unrecognized tax benefits of $328.9 million. If recognized in future years, $293.3 million of these unrecognized income tax benefits would impact the income tax provision and effective tax rate. The following table summarizes the activity related to unrecognized income tax benefits (in thousands):

	Unrecognized Tax Benefit Federal, State, and Foreign Tax
UTB Balance at January 1, 2015	$ 105,330
Gross additions for current year positions	65,439
Gross reductions for prior period positions	(234)
Gross additions for prior period positions	3,460
Decrease due to lapse of statute of limitations	(75)
Additions related to acquisitions	150,152
Currency translation adjustment	(7,825)
UTB Balance at December 31, 2015	$ 316,247
Gross additions for current year positions	142,778
Gross reductions for prior period positions	(35,888)
Gross additions for prior period positions	2,111
Decrease due to lapse of statute of limitations	(3,085)
Additions related to acquisitions	2,350
Currency translation adjustment	88
UTB Balance at December 31, 2016	$ 424,601
Accrued interest and penalties	18,981
Total UTB balance including accrued interest and penalties	$ 443,582
Current portion	$ —
Non-current portion	$ 443,582

The Group records accrued interest as well as penalties related to uncertain tax positions as part of the provision for income taxes. As of December 31, 2016, we had recorded $19.0 million of accrued interest and penalties related to uncertain tax positions on the Consolidated Balance Sheet, all of which was recorded in income taxes. As of December 31, 2015, the balance of accrued interest and penalties was $12.7 million, all of which was recorded in income taxes. During the years ended December 31, 2016 and 2015, we recognized expense of $5.1 million and $1.6 million, respectively, related to interest and penalties.

Our non-U.S. subsidiaries file income tax returns in the countries in which they have operations. Generally, these countries have statutes of limitations ranging from three to 10 years. Various non-U.S. subsidiary income tax returns are currently in the process of examination by taxing authorities.

It is expected that the amount of unrecognized tax benefits will change during the next twelve months; however, the Group does not anticipate any adjustments that would lead to a material impact on our results of operations or our financial position.

As of December 31, 2016, under applicable statutes, the following tax years remained subject to examination in the major tax jurisdictions indicated:

Jurisdiction	Open Years
Canada	2011 through 2016
India	2011 through 2016
Ireland	2013 through 2016
Luxembourg	2013 through 2016
Mexico	2011 through 2016
South Africa	2010 through 2016
United States - federal, state and local	2006 through 2016

NOTE 19. NET LOSS PER SHARE

The following is a reconciliation of the numerator and denominator of basic and diluted net loss per share for the years ended December 31 (in thousands):

	2016	2015
Numerator:		
(Loss) profit on ordinary activities	$ (3,223,772)	$ (300,399)
Less: Net profit (loss) on ordinary activities attributable to minority interests	16	(283)
(Loss) profit on ordinary activities attributable to Endo International plc ordinary shareholders	$ (3,223,788)	$ (300,116)
Loss from discontinued operations attributable to Endo International plc ordinary shareholders, net of tax	(123,278)	(1,194,926)
Net loss attributable to Endo International plc ordinary shareholders	$ (3,347,066)	$ (1,495,042)
Denominator:		
For basic per share data—weighted average shares	222,651	197,100
Dilutive effect of ordinary share equivalents	—	—
Dilutive effect of various convertible notes and warrants	—	—
For diluted per share data—weighted average shares	222,651	197,100

Basic net loss per share data is computed based on the weighted average number of ordinary shares outstanding during the period. Diluted loss per share data is computed based on the weighted average number of ordinary shares outstanding and, if there is net profit on ordinary activities attributable to Endo ordinary shareholders during the period, the dilutive impact of ordinary share equivalents outstanding during the period. Ordinary share equivalents are measured under the treasury stock method.

All stock options and stock awards were excluded from the diluted share calculation for the years ended December 31, 2016 and 2015 because their effect would have been anti-dilutive, as the Group was in a loss position.

The 1.75% Convertible Senior Subordinated Notes due April 15, 2015 were only included in the dilutive net loss per share calculations using the treasury stock method during periods in which the average market price of our ordinary shares was above the applicable conversion price of the Convertible Notes, or $29.20 per share, and the impact would not have been anti-dilutive. In these periods, under the treasury stock method, we calculated the number of shares issuable under the terms of these notes based on the average market price of the shares during the period, and included that number in the total diluted shares outstanding for the period.

We entered into convertible note hedge and warrant agreements, which have subsequently been settled, that, in combination, had the economic effect of reducing the dilutive impact of the Convertible Notes. However, we separately analyzed the impact of the convertible note hedge and the warrant agreements on diluted weighted average shares outstanding. As a result, the purchases of the convertible note hedges were excluded because their impact would have been anti-dilutive. The treasury stock method was applied when the warrants were in-the-money with the proceeds from the exercise of the warrant used to repurchase shares based on the average share price in the calculation of diluted weighted average shares. Until the warrants were in-the-money, they had no impact to the diluted weighted average share calculation.

The dilutive impact of the 1.50% convertible senior notes due 2018 was calculated using the if-converted method, assuming the notes were converted at the time of issuance.

NOTE 20. SAVINGS AND INVESTMENT PLAN AND DEFERRED COMPENSATION PLANS

Savings and Investment Plan

Endo established a defined contribution Savings and Investment Plan (the Endo 401(k) Plan) covering all employees. Employee contributions can be made on a pre-tax basis under section 401(k) of the Internal Revenue Code (the Code). Effective January 1, 2014, the Group will match 100% of the first 3% of eligible cash compensation that a participant contributes to the Endo 401(k) Plan plus 50% of the next 2% for a total of up to 4% of the participants' contributions subject to limitations under section 401(k) of the Code. Participants are immediately vested with respect to their own contributions and the Group's matching contributions.

Costs incurred for contributions made by us to the 401(k) plans amounted to $11.5 million and $8.6 million for the years ended December 31, 2016 and 2015, respectively.

Executive Deferred Compensation Plan

In December 2007, the Board of Directors adopted an executive deferred compensation plan (the Executive Deferred Compensation Plan) and a 401(k) restoration plan (the 401(k) Restoration Plan) both effective as of January 1, 2008. Both plans cover employees earning over the Internal Revenue Code plan compensation limit, which would include the chief executive officer, chief financial officer and other named executive officers. The Executive Deferred Compensation Plan allows for deferral of up to 50% of the bonus, with payout to occur as elected, either in a lump sum or in installments, and up to 100% of restricted stock units granted, with payout to occur either in a lump sum or in installments. Under the 401(k) Restoration Plan the participant may defer the amount of base salary and bonus that would have been deferrable under the Endo 401(k) Plan (up to 50% of salary and bonus) if not for the qualified plan statutory limits on deferrals and contributions. Payment occurs as elected, either in lump sum or in installments.

Directors Stock Election Plan

In December 2007, Endo established a directors stock election plan. The purpose of this plan is to provide non-employee directors the opportunity to have some, or all of their retainer fees delivered in the form of Endo ordinary shares. The amount of shares will be determined by dividing the portion of cash fees elected to be received as shares by the closing price of the shares on the day the payment would have otherwise been paid in cash.

NOTE 21. DEBTORS

The components of Debtors for the years ended December 31 (in thousands) were as follows:

	2016	2015
Amounts falling due within one year:		
Trade debtors	$ 992,153	$ 1,014,808
Prepayments and other debtors	77,523	55,052
Income taxes receivable	47,803	735,901
	$ 1,117,479	$ 1,805,761
Amounts falling due after more than one year:		
Deferred tax asset	$ 7,817	$ 10,423
Other debtors	417,278	79,601
	$ 425,095	$ 90,024

NOTE 22. CREDITORS

The components of Creditors for the years ended December 31 (in thousands) were as follows:

	Note	2016	2015
Provisions for liabilities:			
Amounts falling due within one year:			
Income taxes payable		$ 9,266	$ 8,551
		$ 9,266	$ 8,551
Amounts falling due after more than one year:			
Deferred income taxes	18	$ 192,297	$ 871,040
Other creditors		605,100	236,253
		$ 797,397	$ 1,107,293
		$ 806,663	$ 1,115,844
Creditors:			
Amounts falling due within one year:			
Accrued expenses and trade creditors		1,454,084	1,510,115
Current portion of legal settlement accrual	13	1,015,932	1,606,726
		$ 2,470,016	$ 3,116,841
Amounts falling due after more than one year:			
Long-term legal settlement accrual, less current portion, net	13	$ —	$ 549,098
		$ 2,470,016	$ 3,665,939

NOTE 23. CAPITAL EXPENDITURE COMMITMENTS

The directors have authorized the Group to spend $140 million for capital expenditures in the year ended December 31, 2017.

NOTE 24. RELATED PARTY DISCLOSURES

The principal related party relationships requiring disclosure in the Consolidated Financial Statements pertain to the existence of subsidiaries and associates and transactions with these entities entered into by the Group and the identification of key management personnel as addressed in greater detail below.

Subsidiaries and Associates

The Consolidated Financial Statements include the results of operations, financial positions and cash flows of the Group and its subsidiaries and associates over which the Group has control. A listing of principal subsidiaries and associates is provided in Note 28. Subsidiaries.

Trading Transactions

There were no transactions requiring disclosure under Sch. 3, Part IV, 67 of the Irish Companies Act, 2014.

Compensation of Key Management Personnel of the Group

Key management personnel are the Group's executive and non-executive directors and their compensation is disclosed in Note 26. Directors' Remuneration.

NOTE 25. EMPLOYEES

The average number of persons employed by the Group for the years ended December 31 were as follows:

	2016	2015
Manufacturing	$ 2,566	$ 2,926
Research and development	1,120	597
Selling, general and administrative	2,235	2,913
Total employees	$ 5,921	$ 6,436

Employee costs for the years ended December 31 (in thousands) were as follows:

	2016	2015
Wages and salaries	$ 520,876	$ 488,090
Benefits (1)	109,358	108,883
Share-based compensation	59,769	61,185
Total employee cost	$ 690,003	$ 658,158

(1) Benefits include social security costs, employer paid payroll taxes and other employee benefits paid by the Group.

NOTE 26. DIRECTORS' REMUNERATION

Directors' remuneration set forth in the table below consists of compensation to all non-employee directors in their capacities as such, and includes cash payments made and the grant date fair value of equity awards granted. Remuneration for the years ended December were as follows (in thousands):

	2016	2015
Emoluments	$ 2,053	$ 2,182
Benefits under long-term incentive schemes	$ 2,650	$ 3,189
Contributions to retirement benefit schemes:		
Defined contribution	$ —	$ —
Defined benefit	—	—
	$ —	$ —
Compensation for loss of office paid by the company and other termination payments	$ —	$ —

NOTE 27. AUDITORS' REMUNERATION

PricewaterhouseCoopers LLP served as the Group's independent registered public accounting firm for the years ended December 31, 2016 and 2015. The table below summarizes the aggregate fees for services PricewaterhouseCoopers LLP provided during years 2016 and 2015, respectively.

	2016	2015
Audit fees (1)	$ 11,258	$ 11,565
Audit-related fees (2)	10	640
Tax fees (3)	2,347	1,374
All other fees (4)	7	9
Total auditors' remuneration	$ 13,622	$ 13,588

(1) Fees for audit services in 2016 and 2015 consisted of:
- Audit of the Group's annual financial statements;
- Evaluation and reporting on the effectiveness of the Group's internal controls over financial reporting;
- Reviews of the Group's quarterly financial statements;
- Statutory audits for the Group and certain of its subsidiaries; and
- Comfort letters, consents and other services related to debt issuances, an exchange offer and other SEC matters.

(2) Fees for audit-related services in 2016 and 2015 consisted of:
- Attestation services requested by management;
- Due diligence services; and
- Pre- or post- implementation reviews of processes or systems.

(3) Fees for tax services in 2016 and 2015 consisted of tax compliance and tax planning and advice.
- Tax compliance, planning and advice; and
- Statutory tax return preparation and review and advice on the impact of changes in local tax laws.

(4) All other fees principally includes subscriptions to knowledge tools and other advisory services.

NOTE 28. SUBSIDIARIES

The subsidiaries of Endo International plc are wholly-owned by Endo International plc or one of its subsidiaries. The following is a list of the subsidiaries that principally affect the Group's statutory financial statements:

Subsidiary	Jurisdiction of Incorporation or Organization	Ownership by Endo International plc	Percent of Ownership
Anchen Pharmaceuticals 2, Inc.	Delaware	Indirect	100%
Astora Women's Health Holdings, LLC	Delaware	Indirect	100%
Astora Women's Health, LLC	Delaware	Indirect	100%
Auxilium Pharmaceuticals, LLC	Delaware	Indirect	100%
Endo Bermuda Finance Limited	Bermuda	Indirect	100%
Endo Designated Activity Company	Ireland	Direct	100%
Endo Finance II Limited	Ireland	Indirect	100%
Endo Finance IV Limited	Ireland	Indirect	100%
Endo Finance Limited	Ireland	Indirect	100%
Endo Finance LLC	Delaware	Indirect	100%
Endo Global Ventures	Bermuda	Indirect	100%
Endo Health Solutions Inc.	Delaware	Indirect	100%
Endo Ireland Finance Limited	Ireland	Indirect	100%
Endo Luxembourg Finance Company I S.a.r.l.	Luxembourg	Indirect	100%
Endo Luxembourg Finance Company II S.a.r.l.	Luxembourg	Indirect	100%
Endo Luxembourg Holding Company S.a.r.l	Luxembourg	Indirect	100%
Endo Management Limited	Ireland	Indirect	100%
Endo Par Innovation Company, LLC	Delaware	Indirect	100%
Endo Pharmaceuticals Inc.	Delaware	Indirect	100%
Endo TopFin Limited	Ireland	Indirect	100%
Endo U.S. Inc.	Delaware	Indirect	100%
Endo US Holdings Luxembourg I S.a r.l.	Luxembourg	Indirect	100%
Endo US Holdings Luxembourg II S.a r.l.	Luxembourg	Indirect	100%
Endo Ventures Limited	Ireland	Indirect	100%
Generics Bidco I, LLC (doing business as Par Pharmaceutical)	Delaware	Indirect	100%
Generics International (US) 2, Inc.	Delaware	Indirect	100%
Hawk Acquisition Ireland Limited	Ireland	Indirect	100%
JHP Group Holdings 2, Inc.	Delaware	Indirect	100%
JHP Group Holdings, LLC	Delaware	Indirect	100%
Luxembourg Endo Specialty Pharmaceuticals Holding II S.a r.l.	Luxembourg	Indirect	100%
Paladin Labs Canadian Holding Inc.	Canada	Indirect	100%
Par Pharmaceutical 2, Inc.	Delaware	Indirect	100%
Par Pharmaceutical Companies, Inc.	Delaware	Indirect	100%
Par Pharmaceutical Holdings, Inc.	Delaware	Indirect	100%
Par Pharmaceutical, Inc. (doing business as Par Pharmaceutical)	New York	Indirect	100%
Par Two, Inc.	Delaware	Indirect	100%

NOTE 29. SUBSEQUENT EVENTS

Disposition of Litha Business

On February 27, 2017, the Group entered into a definitive agreement to sell Litha to Acino Pharma AG for up to $100 million in cash. The purchase price payable at the closing is subject to adjustments, including net working capital and net indebtedness adjustments. The transaction is expected to close in the second quarter of 2017 and is subject to customary conditions, including the expiration or termination of any applicable waiting periods under applicable competition laws. The assets and liabilities of the Litha business are classified as held for sale in the Consolidated Balance Sheet as of December 31, 2016. Refer to Note 3. Discontinued Operations and Held for Sale for further discussion.

Impairments

Pursuant to an existing agreement with a wholly owned subsidiary of Novartis AG (Novartis), Paladin licensed the Canadian rights to commercialize serelaxin, an investigational drug for the treatment of acute heart failure (AHF). On March 22, 2017, Novartis announced that a Phase III study of serelaxin in patients with AHF failed to meet its primary endpoints. As a result, Endo has concluded that its serelaxin in-process research and development intangible asset is fully impaired resulting in a $45 million impairment charge. In addition and as a result of the serelaxin impairment, Endo is in the process of assessing the recoverability of its Paladin goodwill balance. Based on the work completed to date, Endo has determined that the estimated fair value of Paladin's goodwill is below its book value resulting in a goodwill impairment charge. The current estimate of the goodwill impairment charge is approximately $83 million. We expect that these impairments will be recorded in the first quarter of 2017.

In addition to the items mentioned above, Endo has identified certain market conditions impacting the recoverability of a developed technology intangible asset in its U.S. Generic Pharmaceuticals segment. As a result, Endo has determined that the intangible asset is impaired. Based on the work completed to date, the current estimate of the non-cash impairment charge related to this intangible asset is approximately $50 million, which we expect to record in the first quarter of 2017.

April 2017 Refinancing

Endo International plc intends to enter into a new credit agreement (the 2017 Credit Agreement) on April 27, 2017 as a guarantor, together with its subsidiaries Endo Luxembourg Finance Company I S.à r.l., and Endo LLC as borrowers, the lenders party thereto and JPMorgan Chase Bank, N.A., as administrative agent, issuing bank and swingline lender. The 2017 Credit Agreement will provide for (i) a five-year revolving credit facility in a principal amount of approximately $1,000.0 million (the 2017 Revolving Credit Facility) and (ii) a seven-year term loan facility in a principal amount of approximately $3,415.0 million (the 2017 Term Loan Facility), provided that each of the 2017 Revolving Credit Facility and the 2017 Term Loan Facility may mature prior to its respective stated maturity in the event that certain of our senior notes are not refinanced or repaid in full prior to the date that is 91 days before the stated maturity of such notes. Any outstanding amounts borrowed pursuant to the 2017 Credit Facility will immediately mature if any of the following of our senior notes are not refinanced or repaid in full prior to the date that is 91 days prior to the stated maturity date thereof:

Instrument	Maturity Date
7.25% Senior Notes due 2022	January 15, 2022
5.75% Senior Notes due 2022	January 15, 2022
5.375% Senior Notes due 2023	January 15, 2023
6.00% Senior Notes due 2023	July 15, 2023

The obligations under the 2017 Credit Agreement will be guaranteed by Endo International plc and its material subsidiaries, as defined in the 2017 Credit Agreement, and certain other subsidiaries from time to time (with certain exceptions) and secured by a lien on substantially all the assets (with certain exceptions) of the borrowers and the guarantors. The 2017 Credit Agreement contains affirmative and negative covenants that the Group believes to be usual and customary for a senior secured credit facility of this type. The negative covenants include, among other things, limitations on asset sales, mergers and acquisitions, indebtedness, liens, dividends, investments and transactions with the Group's affiliates. Borrowings under the 2017 Revolving Credit Facility will bear interest at a rate equal to an applicable margin plus London Interbank Offered Rate (LIBOR). In addition, borrowings under our 2017 Term Loan Facility will bear interest at a rate equal to an applicable margin plus LIBOR, subject to a LIBOR floor of 0.75%.

Also on April 27, 2017, Endo DAC, Endo Finance LLC and Endo Finco Inc. (collectively, the Issuers) intend to issue $300.0 million in aggregate principal amount of 5.875% senior secured notes due 2024 (the 2024 Notes). The 2024 Notes will be issued in a private offering for resale to "qualified institutional buyers" (as defined in Rule 144A under the Securities Act) and outside the United States to non-U.S. persons in compliance with Regulation S under the Securities Act. The 2024 Notes will be senior secured obligations of the Issuers and will be: (a) guaranteed by Endo International plc and its subsidiaries that also guarantee the 2017 Credit Agreement and certain other material indebtedness and (b) secured by a lien on the same collateral that secures the 2017 Credit Agreement. Interest on the 2024 Notes will be payable semiannually in arrears on April 15 and October 15 of each year, beginning on October 15, 2017. The 2024 Notes will mature on October 15, 2024, subject to earlier repurchase or redemption in accordance with the terms of the 2024 Notes indenture. On or after April 15, 2020, the Issuers may on any one or more occasions redeem all or a part of the 2024 Notes, at the redemption prices (expressed as percentages of principal amount) set forth below, plus accrued and unpaid interest and additional interest, if any, on the notes redeemed if redeemed during the twelve-month period beginning on April 15 of the years indicated below:

Year	Percentage
2020	102.938%
2021	101.469%
2022 and thereafter	100.000%

At any time prior to April 15, 2020, the Issuers may on any one or more occasions redeem all or a part of the 2024 Notes at a redemption price equal to 100% of the principal amount of the notes redeemed, plus the applicable premium as defined in the 2024 Notes indenture, plus accrued and unpaid interest and additional interest, if any. In addition, prior to April 15, 2020, the Issuers may, subject to certain restrictions and limitations, redeem up to 35% of the aggregate principal amount of the 2024 Notes with the net cash proceeds from specified equity offerings at a redemption price equal to 105.875% of the aggregate principal amount of the 2024 Notes redeemed, plus accrued and unpaid interest and additional interest, if any. In certain circumstances, the Issuers must offer to repurchase the 2024 Notes at 101% of their principal amount, plus accrued and unpaid interest and additional interest, if any. The 2024 Notes indenture will contain covenants that, among other things, restrict the Group's ability and the ability of its restricted subsidiaries to incur certain additional indebtedness and issue preferred stock, make restricted payments, sell certain assets, enter into sale and leaseback transactions, agree to payment restrictions on the ability of restricted subsidiaries to make certain payments to Endo International plc or any of its restricted subsidiaries, create certain liens, merge, consolidate or sell all or substantially all of the Group's assets, or enter into certain transactions with affiliates. These covenants will be subject to a number of important exceptions and qualifications, including the fall away or revision of certain of these covenants and release of the collateral upon the 2024 Notes receiving investment grade credit ratings.

The Group will use the net proceeds under the 2017 Term Loan Facility, together with the net proceeds of the 2024 Notes and cash on hand, to repay all of its outstanding loans under its existing credit facilities and to pay related fees and expenses. We intend to use the proceeds of the 2017 Revolving Credit Facility from time to time for general corporate purposes.

NOTE 30. APPROVAL OF THE FINANCIAL STATEMENTS

The financial statements were approved by the directors on April 26, 2017.

ENDO INTERNATIONAL PLC
COMPANY RECONCILIATION OF SHAREHOLDERS' FUNDS
FOR THE YEARS ENDED DECEMBER 31, 2016 AND 2015
(In thousands)

	Share Capital Presented as Equity	Share Premium	Profit and Loss Account	Other Reserves	Total Equity
BALANCE, DECEMBER 31, 2014	$ 63	$ 597,798	$ 11,774,337	$ 32,387	$ 12,404,585
Issuance of ordinary shares to Auxilium in connection with the acquisition of Auxilium (18,609,835 ordinary shares of $0.0001 par value issued)	2	1,519,320	—	—	1,519,322
Issuance of 27,982,302 $0.0001 par value ordinary shares	3	2,236,750	—	—	2,236,753
Issuance of ordinary shares to Par in connection with the acquisition of Par (18,069,899 ordinary shares of $0.0001 par value issued)	2	1,325,276	—	—	1,325,278
Net loss	—	—	(1,484,242)	—	(1,484,242)
Share repurchases	—	—	(251,088)	—	(251,088)
Share-based payment activity	—	—	—	59,534	59,534
Shares issued under employee share plans	—	27,574	—	—	27,574
Receipt of Endo International's shares for the purchase of share options or to satisfy minimum tax withholding obligations related to share based awards	—	—	(15,398)	—	(15,398)
Other	(5)	426,797	—	36,985	463,777
BALANCE, DECEMBER 31, 2015	$ 65	$ 6,133,515	$ 10,023,609	$ 128,906	$ 16,286,095
Net loss	—	—	(11,950,189)	—	(11,950,189)
Share-based payment activity	—	—	—	59,769	59,769
Shares issued under employee share plans	—	1,952	—	—	1,952
Receipt of Endo International's shares for the purchase of share options or to satisfy minimum tax withholding obligations related to share based awards	—	—	(11,500)	—	(11,500)
Other	(1)	5,113	—	(5,454)	(342)
BALANCE, DECEMBER 31, 2016	$ 64	$ 6,140,580	$ (1,938,080)	$ 183,221	$ 4,385,785

ENDO INTERNATIONAL PLC
COMPANY BALANCE SHEET
DECEMBER 31, 2016 AND 2015
(In thousands)

	Note	December 31, 2016	December 31, 2015
ASSETS			
Financial Fixed Assets			
Investment in subsidiaries	3	$ 4,405,852	$ 16,318,235
Current Assets			
Debtors - Prepayments and other debtors		1,065	1,278
Debtors - Amounts due from subsidiaries	4	33,979	29,197
Cash at bank and in hand		1,576	1,535
TOTAL ASSETS		$ 4,442,472	$ 16,350,245
EQUITY AND LIABILITIES			
Capital and Reserves			
Called up share capital presented as equity, $0.01 par value Euro deferred shares	7	$ 42	$ 43
Called up share capital presented as equity, $0.0001 par value ordinary shares	7	22	22
Share premium account	7	6,140,580	6,133,515
Other reserves	7	183,221	128,906
Profit and loss account	7	(1,938,080)	10,023,609
Total equity		$ 4,385,785	$ 16,286,095
Creditors (amounts falling due within one year)			
Intercompany loan payable	5	$ 24,718	$ 24,718
Amounts due to subsidiaries	6	29,266	37,338
Accruals and other creditors		2,703	2,094
Total for creditors		$ 56,687	$ 64,150
TOTAL EQUITY AND LIABILITIES		$ 4,442,472	$ 16,350,245

The Notes to the Company Balance Sheet are an integral part of this statement.
The financial statements were approved by the Board of Directors on April 26, 2017 and signed on its behalf by:

/s/ Roger H. Kimmel	/s/ Paul Campanelli
Roger H. Kimmel	Paul Campanelli
Chairman	*Director*

NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Preparation

The financial statements have been prepared on a going concern basis and in accordance with the Companies Act 2014, and Financial Reporting Standard 102 *The Financial Reporting Standard applicable in the UK and Republic of Ireland*. The accompanying balance sheet of Endo International plc (the Company) is presented on a stand-alone basis, including related party transactions. The financial statements are presented in United States (U.S.) dollars, which is the Company's functional and presentation currency. All values are rounded to the nearest thousand U.S. dollars except when otherwise indicated.

The financial statements are prepared under the historical cost convention. The accounting policies which follow set out those policies which apply in preparing the financial statements for the year ended December 31, 2015. The Company has taken advantage of the following disclosure exemptions under FRS 102:

- the requirements of section 4 Statement of Financial Position - Paragraph 4.12 (a) (iv),
- the requirements of section 7 Statement of Cash Flows and Section 3 Financial Statement Presentation paragraph 3.17 (d),
- the requirements of Section 26 Share based Payment: paragraph 26.18 (b), 26.19 to 26.21 and 26.23, and
- the requirements of Section 33 Related Party Disclosures, paragraph 33.7.

Critical Accounting Judgments and Estimation Uncertainty

The preparation of the Company's financial statements requires management to make estimates, judgments and assumptions that may affect the reported amounts of assets, liabilities, turnover and expenses, and related disclosure of contingent assets and liabilities. On an on-going basis, the Company evaluates its estimates and judgments and methodologies, including those related to its investments in subsidiaries and share-based compensation. The Company bases its estimates on historical experience and on various other assumptions that are believed to be reasonable, the results of which form the basis for making judgments about the carrying values of assets and liabilities. Actual results may differ from these estimates under different assumptions or conditions.

Employees and Directors

The Company had no employees during the year. The Company's directors are not employees but are remunerated for their service by the parent company. See Note 26. Directors' Remuneration of the notes to the consolidated financial statements for a summary of their remuneration.

Related Party Transactions

The Company has not disclosed any other related party transactions as it has availed of the exemption available under the provisions of FRS 102 Section 33.1A ''Related Party Disclosures'' which exempts disclosure of transactions entered into between two or more members of a group, provided that any subsidiary which is a party to the transaction is wholly owned by a member of that group.

Investment in Subsidiaries

Investment in subsidiary is stated in the Company's Balance Sheet at cost less any return of capital, unless it has been impaired in which case it is carried at net of any impairment loss recognized.

Share Based Payments

Endo International plc and its subsidiaries operate a number of share based payment plans the details of which are presented in Note 16. Share-Based Compensation to the Consolidated Financial Statements. The share based payment expense associated with the share plans is recognized as an expense by the group entity, which employs and receives the services in exchange for the share based compensation. In these Company only accounts, the profit and loss account is charged with only the expense related to the services received directly by the Company. The cost for equity awards granted to the Company's subsidiaries' employees represents additional capital contributions by the Company to its subsidiaries. An additional investment in subsidiaries has been recorded in respect of those equity awards granted to the Company's subsidiaries' employees, with a corresponding increase in the Company's shareholder funds. The additional capital contribution is based on the fair value at the grant date of the equity awards issued, allocated over the life of the underlying grant's vesting period.

Share Premium

The difference between the proceeds received on issue of shares and the nominal value of the shares is credits to the share premium account.

Profit and loss account

In accordance with Section 304 of the Companies Act 2014, the Company is availing of the exemption from presenting the individual profit and loss account. Endo International plc's losses for the years ended December 31, 2016 and 2015 were $11,950.2 million and $1,484.2 million, respectively. No other comprehensive income or losses were applicable for the years ended December 31, 2016 and 2015.

Share Repurchases

The Company accounts for the repurchase of ordinary shares at par value. Under applicable Irish law, ordinary shares repurchased are retired and not displayed separately as treasury stock. Upon retirement of the ordinary shares, the Company records the weighted average cost of such ordinary shares as an adjustment to its consolidated Profit and loss account in the Company's Balance Sheet.

Foreign Currency

The Company's functional and reporting currency is the U.S. dollar. Transactions in foreign currencies are recorded at the exchange rate prevailing on the date of the transaction. The resulting monetary assets and liabilities are translated into U.S. dollars at exchange rates prevailing on the subsequent balance sheet date. Gains and losses as a result of translation adjustments are recorded within ''Other income (expense), net'' in the Consolidated Profit and Loss Account.

Taxation

Deferred tax is recognised in respect of all timing differences which are differences between taxable profits and total comprehensive income that arise from the inclusion of income and expenses in tax assessments in periods different from those in which they are recognised in the financial statements, except that unrelieved tax losses and other deferred tax assets are recognised only to the extent that the directors consider that it probable that they will be recovered against the reversal of deferred tax liabilities or other future taxable profits. Deferred tax is measured on an undiscounted basis at the tax rates that are expected to apply in the periods in which timing differences reverse, based on tax rates and laws enacted or substantively enacted at the balance sheet date. The Company accounts for uncertain tax positions using a ''more-likely-than-not'' threshold for recognizing and resolving uncertain tax positions. The evaluation of uncertain tax positions is based on factors including, but not limited to, changes in tax law, the measurement of tax positions taken or expected to be taken in tax returns, the effective settlement of matters subject to audit, new audit activity and changes in facts or circumstances related to a tax position. The Company evaluates this tax position on a quarterly basis. The Company also accrues for potential interest and penalties related to unrecognized tax benefits in income tax expense.

NOTE 2. HISTORY AND DESCRIPTION OF THE COMPANY

Endo International plc was incorporated in Ireland on October 31, 2013 as a private limited company and re-registered effective February 18, 2014 as a public limited company. It was established for the purpose of facilitating the business combination between Endo Health Solutions Inc. (EHSI) and Paladin Labs Inc. (Paladin).

On February 28, 2014, pursuant to an arrangement agreement, dated November 5, 2013 (the Arrangement Agreement), among EHSI, Endo International Limited, Endo Limited (formerly known as Sportwell II Limited), Endo U.S. Inc. (formerly known as ULU Acquisition Corp.), RDS Merger Sub, LLC (Merger Sub), 8312214 Canada Inc. and Paladin (a) Endo International Limited indirectly acquired all of the outstanding common shares of Paladin pursuant to a plan of arrangement under Canadian law (the Arrangement); and (b) Merger Sub merged with and into EHSI, with EHSI as the surviving corporation in the merger (the Merger and, together with the Arrangement, the Transactions). Following consummation of the Transactions, each of EHSI and Paladin became indirect wholly owned subsidiaries of Endo International plc.

Pursuant to the Arrangement, (a) former Paladin shareholders received C$1.16 in cash, 1.6331 newly issued Endo International ordinary shares and one common share of Knight Therapeutics Inc., a newly formed corporation incorporated under the laws of Canada that was separated from Paladin as part of the Transactions, in exchange for each Paladin common share held by such former shareholders; (b) all options to acquire Paladin common shares were settled on a cashless exercise basis for Endo International ordinary shares and common shares of Knight Therapeutics Inc. in an amount reflecting the arrangement consideration; and (c) unvested rights to receive additional common shares under Paladin's share purchase plan were settled for a cash amount based on the Paladin common share price immediately prior to the effective time of the Arrangement. At the effective time of the Merger, each share of EHSI common stock was cancelled and automatically converted into the right to receive one Endo International plc ordinary share. Immediately following the closing of the transaction, former EHSI shareholders owned approximately 79% of Endo International plc, and former Paladin shareholders owned approximately 21%.

Endo International plc is an Ireland-domiciled, global specialty pharmaceutical company focused on branded and generic pharmaceuticals. We aim to be the premier partner to healthcare professionals and payment providers, delivering an innovative suite of branded and generic drugs to meet patients' needs. The Company's corporate headquarters are located at First Floor, Minerva House, Simmonscourt Road, Ballsbridge, Dublin 4, Ireland. The Company's headquarters for its United States operations is based in Malvern, Pennsylvania.

NOTE 3. INVESTMENT IN SUBSIDIARIES

A reconciliation of the change in the Investment in Subsidiaries balance from December 31, 2014 to December 31, 2016 is as follows (in thousands):

	Investment in Subsidiaries
Balance - December 31, 2014, at cost	$ 12,418,765
Investment in subsidiaries at cost on January 29, 2015	1,519,320
Investment in subsidiaries at cost on June 10, 2015	2,236,750
Investment in subsidiaries at cost on September 25, 2015	1,325,276
Capital contribution in respect of share-based payment plans	93,598
Impairment	(1,703,000)
Other	427,526
Balance - December 31, 2015, at cost	$ 16,318,235
Capital contribution in respect of share-based payment plans	51,389
Impairment	(11,909,000)
Other	(54,772)
Balance - December 31, 2016, at cost	$ 4,405,852

The Company was re-registered as a public limited company effective February 18, 2014 and Endo International plc was formed. Refer to Note 2. History and Description of the Company for a description of this transaction.

On January 29, 2015, the Company, through an indirect wholly owned subsidiary, acquired all of the outstanding shares of common stock of Auxilium. The consideration included 18,609,835 ordinary shares valued at $1.52 billion. On June 10, 2015, the Company completed the sale of 27,627,628 ordinary shares for gross proceeds of $2.24 billion, including fees, in order to finance a portion of the Par acquisition. On September 25, 2015, the Company, through an indirectly wholly owned subsidiary, acquired Par. The consideration included 18,069,899 ordinary shares valued at $1.33 billion.

During the years ended December 31, 2016 and 2015, the Company identified certain trigger events indicating a potential impairment of its Investment in subsidiaries balance and initiated an Investment in subsidiaries impairment analysis as of December 31, 2016 and 2015. As a result of this analysis, the Company determined that the net book value of its Investment in subsidiaries asset exceeded its estimated fair value. As part of the impairment analysis, the Company recorded non-cash impairment charges of $11.9 billion and $1.7 billion in the Profit and loss accounts for the years ended December 31, 2016 and 2015, respectively, representing the difference between the estimated fair value of the Company's Investment in subsidiaries and its respective book value. The 2016 impairment was primarily driven by a combination of factors, including a sustained downturn in Endo's stock price, increased buying power from the continued consolidation of the Company’s generic business customer base, a significant change in the value derived from the level and frequency of anticipated pricing opportunities in the future and increased levels of competition, particularly in the Company’s U.S. Generics reporting unit, due to the entry of new low cost competitors and accelerated FDA ANDA approvals. The 2015 impairment was primarily due to the Company's revised expectations of certain TRT products and other elements of the UEO business due to current and expected market conditions. If the estimated control premium for the impairment analysis had increased or decreased from management's estimate by 1%, the impairment of the Investment in subsidiaries balance would have changed by $37 million for the year ended December 31, 2016.

Other for the year ended December 31, 2016 consists primarily of dividends totaling $54.8 million from the Company's consolidated subsidiaries. Other for the year ended December 31, 2015 consists primarily of the fair value of the equity component of the $350.0 million 1.50% convertible senior notes due 2018 (the Auxilium Notes) acquired at the consummation of the merger agreement between the Company and Auxilium, along with the conversion of the Auxilium Notes.

NOTE 4. AMOUNTS DUE FROM SUBSIDIARIES

Amounts due from subsidiaries of $34.0 million and $29.2 million at December 31, 2016 and 2015, respectively, are non-interest bearing and payable on demand.

NOTE 5. INTERCOMPANY LOAN PAYABLE

On February 28, 2014, the Company issued $24.7 million in aggregate principal amount of a non-interest bearing note to an affiliate. The loan is due upon the earlier of the expiration of five years from the issuance date or upon written demand by the affiliate.

NOTE 6. AMOUNTS DUE TO SUBSIDIARIES

Amounts due to subsidiaries of $29.3 million and $37.3 million at December 31, 2016 and 2015, respectively, are non-interest bearing and payable on demand.

NOTE 7. SHARE CAPITAL

Share Capital consists of the following for the year ended December 31 (in thousands):

	2016
Authorized:	
4,000,000 Euro deferred shares of $0.01 par value	$ 40
1,000,000,000 ordinary shares of $0.0001 par value	100
Total share capital	$ 140

	(In thousands)
Allotted, called-up and fully paid equity:	
BALANCE, DECEMBER 31, 2014	$ 63
Issuance of 18,609,835 ordinary shares of $0.0001 par value to Auxilium in connection with the purchase of Auxilium	2
Issuance of 27,982,302 ordinary shares of $0.0001 par value	3
Issuance of 18,069,899 ordinary shares of $0.0001 par value to Par in connection with the purchase of Par	2
Shares issued under employee share plans	—
Other	(5)
BALANCE, DECEMBER 31, 2015	$ 65
Shares issued under employee share plans	—
Other	(1)
BALANCE, DECEMBER 31, 2016	$ 64

On January 29, 2015, the Company acquired Auxilium for total consideration of $2.6 billion. The consideration included 18,609,835 ordinary shares valued at $1.52 billion.

On June 10, 2015, the Company completed the sale of 27,627,628 ordinary shares, including 3,603,603 ordinary shares sold upon the exercise in full by the underwriters of their option to purchase additional ordinary shares, at a price of $83.25 per share, for aggregate gross proceeds to the Company of $2,300.0 million, before fees, in order to finance a portion of the Par acquisition.

On September 25, 2015, the Company acquired Par for total consideration of $8.14 billion, including the assumption of Par debt. The consideration included 18,069,899 ordinary shares valued at $1.33 billion.

Share Repurchase Program

The Company has broad shareholder authority to conduct share repurchases of its ordinary shares, as its shareholders granted to the Company a general authority (the 2014 Share Buyback Authority) to make overseas market purchases (as defined by section 212 of the Irish Companies Act 1990 (the 1990 Act)) of shares of the Company on such terms and conditions as the Company's Board of Directors may approve, but subject to the provisions of the 1990 Act and certain other provisions.

Pursuant to the 2014 Share Buyback Authority, in April 2015, the Company's Board of Directors approved a share buyback program (the 2015 Share Buyback Program). The 2015 Share Buyback Program authorizes the Company to redeem in the aggregate $2.5 billion of its outstanding ordinary shares. In accordance with Irish Law and the Company’s Articles of Association, all ordinary shares redeemed shall be cancelled upon redemption.

In November 2015, the Company entered into a program to repurchase up to $250.0 million of its ordinary shares under the 2015 Share Buyback Program. The Company purchased approximately 4.4 million of its ordinary shares during November 2015 totaling $250.0 million, not including related fees.

Stock Incentive Plans

In June 2015, the Company's shareholders approved the 2015 Stock Incentive Plan (the 2015 Plan). As of the effective date of the 2015 Plan, 10.0 million ordinary shares, which included the transfer of 5.0 million ordinary shares available to be granted under the previous 2010 Stock Incentive Plan, were reserved for the granting of stock options (including incentive stock options), stock appreciation rights, restricted stock awards, performance awards and other share-based awards, which may be issued at the discretion of the Company's board of directors from time to time. Upon the approval of the 2015 Plan, no additional ordinary shares were to be granted under the previously approved plans, including the Company's 2000, 2004, 2007, 2010 and Assumed Stock Incentive Plans. All awards granted and outstanding under the prior plans remain subject to the terms of those prior plans.

At December 31, 2016, approximately 6.9 million ordinary shares were reserved for future grants under the 2015 Plan. As of December 31, 2016, stock options, restricted stock awards, performance stock units and restricted stock units have been granted under the stock incentive plans.

Share premium account

This reserve records the amount above the nominal value received for shares sold, less transaction costs.

Other reserves

This reserve is used to recognise the value of equity-settled share-based payments provided to employees of the group as part of their remuneration.

NOTE 8. CONTINGENCIES

The Company and certain of our subsidiaries are involved in various claims, legal proceedings and governmental investigations that arise from time to time in the ordinary course of our business, including relating to product liability, intellectual property, regulatory compliance and commercial matters. While the Company cannot predict the outcome of these ongoing legal proceedings and the Company and our subsidiaries intend to defend vigorously our and their position, an adverse outcome in any of these proceedings could have a material adverse effect on our current and future financial position, results of operations and cash flows. See Note 13. Commitments and Contingencies of the accompanying Consolidated Financial Statements included in this report for additional information.

NOTE 9. GUARANTEES

On February 28, 2014, Endo International plc became the ultimate parent company and EHSI became a stand-alone subsidiary in accordance with the Arrangement Agreement and as further described above in Note 2. History and Description of the Company. As part of the Arrangement Agreement, the guarantee structure was updated to reflect the newly created legal structure under which Endo International plc assumed the obligations of EHSI as issuer or guarantor under the various indentures covering the outstanding Convertible Notes of EHSI.

In accordance with the provisions of Section 357 of the Companies Act 2014, the Company has guaranteed the liabilities of certain of its Irish subsidiaries in respect of the year ended December 31, 2015 in order to avail of the exemption from the filing provisions under Section 347 of the Companies Act 2014. These Irish subsidiaries are Endo Ventures Limited and Endo DAC.

The Company is also a guarantor on both Dublin leases at Minerva House and Simmonscourt House, respectively, both with an address at Simmonscourt Road, Dublin 4, Ireland.

Endo International plc intends to enter into a new credit agreement (the 2017 Credit Agreement) on April 27, 2017 as a guarantor, together with its subsidiaries Endo Luxembourg Finance Company I S.à r.l., and Endo LLC as borrowers, the lenders party thereto and JPMorgan Chase Bank, N.A., as administrative agent, issuing bank and swingline lender. The 2017 Credit Agreement will provide for (i) a five-year revolving credit facility in a principal amount of approximately $1,000.0 million (the 2017 Revolving Credit Facility) and (ii) a seven-year term loan facility in a principal amount of approximately $3,415.0 million (the 2017 Term Loan Facility); will provide that each of the 2017 Revolving Credit Facility and the 2017 Term Loan Facility may mature prior to its respective stated maturity in the event that certain of our senior notes are not refinanced or repaid in full prior to the date that is 91 days before the stated maturity of such notes. Also on April 27, 2017, Endo DAC, Endo Finance LLC and Endo Finco Inc. (collectively, the Issuers) intend to issue $300.0 million in aggregate principal amount of 5.875% senior secured notes due 2024 (the 2024 Notes). The 2024 Notes will be guaranteed by Endo International plc.

NOTE 10. AUDITORS' REMUNERATION

Total auditors' remuneration paid to PricewaterhouseCoopers and its affiliated firms for the years ended December 31, 2016 and 2015 were as follows (in thousands):

	2016	2015
Audit of the Company's individual accounts	$ 97	$ 128
Total auditors' remuneration	$ 97	$ 128

See Note 27. Auditors' Remuneration of the accompanying Consolidated Financial Statements included in this report for additional information regarding fees paid to the auditors by the Company.

NOTE 11. APPROVAL OF THE FINANCIAL STATEMENTS

The financial statements were approved by the directors on April 26, 2017.


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